THE NEOLITHIC OF EUROPE

PAPERS IN HONOUR OF ALASDAIR WHITTLE

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Edited by

PENNY BICKLE, VICKI CUMMINGS,
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Front cover: Alleskoven dolmen, Denmark (Vicki Cummings).
Back cover: La Table des Marchands, France (Vicki Cummings); a reconstructed LBK longhouse in the Paris basin (Penny Bickle); Carrowmore, Ireland (Vicki Cummings); an excavation in progress at the Herpaly tell, Hungary (Pál Raczky).

Contents

List of figures vii
List of tables xi
List of contributors xii
Tabula gratulatoria xv

1. Introduction: Alasdair Whittle and the Neolithic of Europe 1
Joshua Pollard, Penny Bickle, Vicki Cummings and Daniela Hofmann
2. 'Very like the Neolithic': the everyday and settlement in the European Neolithic 7
Penny Bickle and Evita Kalogiropoulou
3. The end of the tells: the Iron Age 'Neolithic' in the central and northern Aegean 24
James Whitley
4. Encounters in the watery realm: early to mid-Holocene geochronologies of Lower Danube human–river interactions 35
Steve Mills, Mark Macklin and Pavel Mirea
5. Buried in mud, buried in clay: specially arranged settlement burials from in and around the Danubian Sárköz, Neolithic southern Hungary 47
Eszter Bánffy, János Jakucs, Kitti Köhler, Tibor Marton, Krisztián Oross and Anett Osztás
6. The chosen ones: unconventional burials at Polgár–Csőszhalom (north-east Hungary) from the fifth millennium cal BC 63
Pál Raczky and Alexandra Anders
7. A tale of two processes of Neolithisation: south-east Europe and Britain/Ireland 82
Rick Schulting and Dušan Borić
8. Stag do: ritual implications of antler use in prehistory 107
László Bartosiewicz, Alice M. Choyke and Ffion Reynolds
9. Towards an integrated bioarchaeological perspective on the central European Neolithic: understanding the pace and rhythm of social processes through comparative discussion of the western loess belt and Alpine foreland 120
Amy Bogaard, Stefanie Jacomet and Jörg Schibler
10. Size matters? Exploring exceptional buildings in the central European early Neolithic 145
Daniela Hofmann and Eva Lenneis
11. Feasts and sacrifices: fifth millennium 'pseudo-ditch' causewayed enclosures from the southern Upper Rhine valley 159
Philippe Lefranc, Anthony Denaire and Rose-Marie Arbogast
12. From Neolithic kings to the Staffordshire hoard. Hoards and aristocratic graves in the European Neolithic: the birth of a 'Barbarian' Europe? 175
Christian Jeunesse

13. Sudden time? Natural disasters as a stimulus to monument building, from Silbury Hill (Great Britain) to Antequera (Spain) 188
Richard Bradley and Leonardo García Sanjuán

14. Art in the making: Neolithic societies in Britain, Ireland and Iberia 201
Andrew Meirion Jones, Andrew Cochrane and Marta Diaz-Guardamino

15. Community building: houses and people in Neolithic Britain 222
Alistair J. Barclay and Oliver J. T. Harris

16. Passage graves as material technologies of wrapping 235
Vicki Cummings and Colin Richards

17. Rings of fire and Grooved Ware settlement at West Kennet, Wiltshire 249
Alex Bayliss, Caroline Cartwright, Gordon Cook, Seren Griffiths, Richard Madgwick, Peter Marshall and Paula Reimer

18. Remembered and imagined belongings: Stonehenge in the age of first metals 279
Joshua Pollard, Paul Garwood, Mike Parker Pearson, Colin Richards, Julian Thomas and Kate Welham

19. Interdigitating pasts: the Irish and Scottish Neolithics 298
Alison Sheridan

List of figures

Figure 2.1. Map of Europe indicating the regions discussed in this paper.
Figure 2.2. Distribution of sites in northern Greece. A) Macedonia; B) western Thrace.
Figure 2.3. Example of building and thermal structure associations from the Neolithic site Avgi I in Kastoria.
Figure 2.4. Distribution of sites in the Paris basin.
Figure 2.5. Examples of longhouse plans from the RRBP (A–C) and VSG (D–F) in the Paris basin.
Figure 3.1. Plan of the Aegean showing sites mentioned in text.
Figure 3.2. Plan of Lefkandi, Xeropolis.
Figure 3.3. Plan of Vardaroftsa (modern Axiochori), showing the relationship between the central tell (*toumba*) and its surrounding tables (*trapezes*).
Figure 3.4. Photo of the *toumba* of Saratsé (modern Perivolaki).
Figure 4.1. Map showing main geographic features, rivers and sites mentioned in the text.
Figure 4.2. Geomorphological map of the Teleorman valley (SRAP) study area showing river terraces, palaeochannels, and location of archaeological sites.
Figure 4.3. Map of the Turnu Măgurele–Zimnicea study area showing main features and sites mentioned in the text.
Figure 5.1. Map of the study area with the main sites mentioned in the text.
Figure 5.2. Human remains inside ovens from Alsónyék.
Figure 5.3. Feature 1531 from Alsónyék: a complete human skeleton and part of a fragmented skull found inside an oven.
Figure 5.4. Pit 3036 from Szederkény-Kukorica-dűlő, which contained remains of four individuals.
Figure 5.5. Feature 65 from Fajsz-Garadomb: secondary burial.
Figure 5.6. Fragmented clay figurines unearthed in feature 65 from Fajsz-Garadomb.
Figure 6.1. Polgár-Csőszhalom. 1: the topography of the tell and the horizontal settlement; 2: magnetometric plan of the site with the excavated areas and the locations of the burials mentioned in the text.
Figure 6.2. Polgár-Csőszhalom. Distribution of 16 grave good types in burials furnished with various artefacts.
Figure 6.3. Burial 1. Polgár-Csőszhalom, tell settlement – grave 3.
Figure 6.4. Burial 2. Polgár-Csőszhalom, horizontal settlement. Detail from feature 836/1827.
Figure 6.5. Burial 2. Polgár-Csőszhalom, horizontal settlement east of the tell-enclosure complex – feature 836/1827.
Figure 6.6. Burial 2. Polgár-Csőszhalom, horizontal settlement east of the tell-enclosure complex – feature 836/1827, grave goods.
Figure 6.7. Burial 3. Polgár-Csőszhalom, horizontal settlement west of the main tell-enclosure complex – Str. 265.
Figure 6.8. Burial 4. Polgár-Csőszhalom, horizontal settlement, feature 5/122.
Figure 7.1. Map showing locations of key sites mentioned in the text.
Figure 7.2. Plot of $\delta^{13}C$ and $\delta^{15}N$ values on Mesolithic and early/middle Neolithic human bone collagen from south-east Europe.
Figure 7.3. Plot of $\delta^{13}C$ and $\delta^{15}N$ values on Mesolithic and early Neolithic human bone collagen from the Danube Gorges area.
Figure 7.4. Comparison between $\delta^{34}S$ and $\delta^{15}N$ values on the same individuals from the Danube Gorges area by main chronological periods.

Figure 7.5. Post-weaning human bone/dentine collagen $\delta^{13}C$ and $\delta^{15}N$ values from coastal/near-coastal Mesolithic and Neolithic sites in Britain and Ireland.
Figure 7.6. Human bone/tooth collagen $\delta^{13}C$ values from British and Irish Neolithic coastal and near-coastal sites plotted against the average of the 95.4% range of the calibrated radiocarbon date.
Figure 7.7. Human bone/tooth collagen $\delta^{13}C$ and $\delta^{15}N$ values from inland and coastal Neolithic sites in Ireland, Wales, England and Scotland.
Figure 7.8. Average ± 2 standard errors for $\delta^{13}C$ and $\delta^{15}N$ values on human bone/tooth collagen from inland and coastal Neolithic sites in Britain and Ireland.
Figure 8.1. Approximate areas of Celtic and Scythian influence in northern Hungary during the Iron Age.
Figure 8.2. The percentual distribution of identifiable Iron Age animal bones at Sajópetri–Hosszú-dűlő.
Figure 8.3. The anatomical position of the worked stag skull fragment.
Figure 8.4. Frontal view of the stag skull fragment with fine cut mark at the base of the right pedicle.
Figure 8.5. Fronto-occipital view of the stag skull fragment with rough cut mark in the parietal region on the right side.
Figure 8.6. The inner view of the stag skull fragment, showing the well preserved surface of the brain case.
Figure 8.7. The location of posthole 95.34 in relation to other features in the south-western section of the Sajópetri–Hosszú-dűlő settlement.
Figure 8.8. The age distribution of major animal groups exploited at Sajópetri–Hosszú-dűlő.
Figure 8.9. The standard scores of red deer bone measurements from Sajópetri–Hosszú-dűlő in relation to the average of Bronze Age red deer in Hungary.
Figure 8.10. Cernunnos on the first century Pillar of the Boatmen in the Museé de Cluny in Paris.
Figure 8.11. Cernunnos depicted on the inside plate No. C 6571 of the Gundestrup cauldron from Denmark.
Figure 8.12. Imaginary reconstruction of the way a Palaeolithic reindeer antler decoy might have been used.
Figure 8.13. Image of a stag tattoed on the left shoulder of the 'Princess of Ukok' 2500 years ago.
Figure 8.14. Marsigli's depiction of a 'deer of plenty'.
Figure 8.15. Remains of red deer trophies recovered near the middle Bronze Age palisade at Jászdózsa–Kápolnahalom, Hungary.
Figure 9.1. Chronology table with the cultural groups mentioned in the text.
Figure 9.2. Map of the area considered in this paper, with location of the regions mentioned.
Figure 9.3. Importance of domestic and wild animals in Neolithic lakeshore settlements of central and eastern Switzerland.
Figure 9.4. Comparison between importance of wild animals based on numbers of bone fragments, site type and chronology.
Figure 10.1. Map of LBK distribution with main sites mentioned in the text.
Figure 10.2. Bylany, house 306 as one example of tripartite houses on a south–north slope.
Figure 10.3. Plan of Harting. Exceptionally long buildings are shaded.
Figure 10.4. Simplified plan of houses 9 and 10 at Harting.
Figure 10.5. Plan of Geleen-Janskamperveld showing different house types.
Figure 10.6. A type 1a house (house 24) from Geleen-Janskamperveld.
Figure 10.7. Bipartite house types of Cuiry-lès-Chaudardes compared to tripartite LBK *Großbauten* from Miskovice, Bohemia.
Figure 10.8. Stock breeding and game in relation to house size at Cuiry-lès-Chaudardes.
Figure 10.9. Relation of domesticated animals and game on the basis of bone weight at Mold.
Figure 11.1. Evolutionary scheme of a 'pseudo-ditched' enclosure.
Figure 11.2. Distribution of 'pseudo-ditched' enclosures in the first half of the fifth millennium cal BC in Europe.
Figure 11.3. Simplified chronological sequence of the Neolithic cultures in the southern Upper Rhine plain (5300–4000 cal BC).
Figure 11.4. Distribution of Alastian enclosures mentioned in the text.
Figure 11.5. Plan of the Planig-Friedberg/Rössen period enclosure at Vendenheim 'Aux portes du Kochersberg'.
Figure 11.6. Plan of the Rössen period enclosure at Meistratzheim 'Station d'épuration'.
Figure 11.7. Plan of the Bischheim period enclosure at Schwindratzheim and its pseudo-ditch sections.
Figure 11.8. Plan of the Bischheim/Bruebach-Oberbergen period enclosure at Duntzenheim 'Frauenabwand'.
Figure 11.9. Plan of the Bischheim–BORS enclosure at Entzheim 'Les Terres de la Chapelle'.
Figure 11.10. Section five of the Entzheim 'Les Terres de la Chapelle' enclosure, showing its constitutive segments and pseudo-ditch sections.

Figure 11.11. Distribution of pig mandibles at Duntzenheim 'Frauenabwand'.
Figure 12.1. Miniature bronze cult wagons from G1 graves. 1: Trudshøj; 2: Strettweg.
Figure 12.2. The Bajč grave, late LBK, Slovakia.
Figure 12.3. Brześć-Kujawski culture G2 grave of a woman from Krusza Zamkova, Poland.
Figure 13.1. The Locmariaquer monument complex.
Figure 13.2. Le Grand Menhir Brisé.
Figure 13.3. Interior general view of Menga (Antequera, Málaga, Spain).
Figure 13.4. Excavation in progress at Menga's well in 2005.
Figure 13.5. La Peña de los Enamorados (Antequera, Málaga, Spain) at dusk from the east.
Figure 13.6. Camorro de las Siete Mesas in El Torcal's karstic landscape (Antequera, Málaga, Spain).
Figure 13.7. Diagram showing the aggregated radiocarbon dates for El Toro, Menga and Viera, together with El Aguadero 'Axarquía E-[0-9]–[0-9]' earthquake.
Figure 14.1. Fourknocks I, Co. Meath.
Figure 14.2. Orthostat L19, Newgrange Site 1, Co. Meath.
Figure 14.3. Rock art at Drumsinnot, Co. Louth, Ireland.
Figure 14.4. Partially erased eyebrow motif on the face of Folkton drum 2 (Folkton, North Yorkshire, Britain). Left: line drawing highlighting the outline of the motif. Right: the motif viewed under Reflectance Transformation Imaging specular enhancement mode.
Figure 14.5. Detail of a decorated menhir, found grouped with seven other menhirs near the village of Figueira (Budens, Vila do Bispo, Portugal).
Figure 14.6. Menhir 1 of Padrão (Vila do Bispo, Portugal).
Figure 14.7. Decorated orthostats in the gallery grave of Soto 1 (Trigueros, Huelva, Spain). Orthostat I23, a reused statue-menhir, shows a 'T'-shaped motif in low relief on its lower end, interpreted as an inverted face.
Figure 14.8. Tracing of one of the orthostats of the dolmen of Monte dos Marxos (Rodeiro, Pontevedra, Spain).
Figure 14.9. Multiple plot of the calibrated probability distributions for the radiocarbon measurements mentioned in the text.
Figure 14.10. View of a flat area of the Pedra das Ferraduras (Fentáns, Pontevedra, Spain), showing a series of engravings attributed to the Neolithic.
Figure 14.11. Detail of panel 4 in the Cueva del Castillo (Monfragüe, Cáceres, Spain). The tracing shows a complex series of superimposed motifs.
Figure 14.12. Grave goods documented in the passage grave of Anta Grande da Ordem (Portalegre, Alentejo, Portugal), including various decorated stone plaques.
Figure 15.1. Comparative range of early Neolithic buildings from Britain and Ireland.
Figure 15.2. Comparative plans of White Horse Stone, Lismore Fields and Horton.
Figure 15.3. Comparative 'villages' – Horton, Lismore Fields and Corbally.
Figure 15.4. Comparative use 'spans' of the structures at White Horse Stone, Horton house 1 and Warren Field.
Figure 16.1. Aerial view of Maeshowe passage grave.
Figure 16.2. View of the Maeshowe ditch as a container of water.
Figure 16.3. The passage grave at Newgrange Site K.
Figure 16.4. The Newgrange passage grave.
Figure 16.5. The smaller passage graves at Knowth surrounding the main mound.
Figure 16.6. The central passage grave at Knowth is surrounded by earlier passage graves.
Figure 16.7. Plan and section of Bryn Celli Ddu, showing the unusual location of the kerb.
Figure 16.8. The large standing stone in the chamber at Bryn Celli Ddu.
Figure 16.9. Burial cist B was one of the primary features within the passage grave of Quanterness.
Figure 17.1. Alasdair Whittle directing excavations at Windmill Hill in 1988.
Figure 17.2. Overall plan of the West Kennet palisade enclosures showing the locations of the dated samples.
Figure 17.3. Probability distributions of dates from the West Kennet palisaded enclosures. Each distribution represents the relative probability that an event occurs at a particular time.
Figure 17.4. Probability distributions for the number of years between the constructions of the two palisaded enclosures at West Kennet.
Figure 17.5. Probability distributions for the construction of the West Kennet palisaded enclosures following alternative archaeological interpretations.
Figure 17.6. Probability distributions of dates from the West Kennet Grooved Ware settlement.

Figure 17.7. Probability distribution for the number of years during which settlement activity occurred at West Kennet.
Figure 17.8. Probability distributions for the number of years between the constructions of the palisaded enclosures and the Grooved Ware settlement at West Kennet.
Figure 17.9. Probability distributions of dates from Neolithic activity in the Avebury area.
Figure 17.10. Probability distributions of dates for late Neolithic activity on Windmill Hill.
Figure 17.11. Probability distributions of dates from the Longstones enclosure.
Figure 17.12. Probability distributions for the number of years between the foundation of the Grooved Ware settlement at West Kennet and completion of the lower organic mound in the centre of Silbury Hill.
Figure 17.13. Probability distributions of dates associated with Beaker pottery in the Avebury area.
Figure 17.14. Probability distributions of dates from Neolithic linear monuments.
Figure 17.15. Key parameters for estimated dates of construction for selected middle Neolithic monuments in England.
Figure 17.16. Probability distributions of dates from other palisade enclosures in Britain.
Figure 17.17. Key parameters for palisaded enclosures in Britain.
Figure 18.1. Stonehenge and its landscape.
Figure 18.2. Principal features of Stonehenge Stage 3.
Figure 18.3. Principal features of Stonehenge Stage 4.
Figure 18.4. Principal features of Stonehenge Stage 5.
Figure 18.5. The distribution of Beaker and early Bronze Age ceramics within Stonehenge.
Figure 18.6. Axe and dagger carvings on stones 4 and 53.
Figure 18.7. Detail of the south-eastern sector of Stonehenge during Stages 4 and 5, showing features related to the marking of the midwinter sunrise and/or southernmost moonrise.
Figure 18.8. Areas of (a) early Bronze Age settlement and (b) middle Bronze Age field systems in the Stonehenge landscape.
Figure 18.9. The Palisade/Gate Ditch.
Figure 18.10. The Palisade Ditch under excavation, with sheep burial in late phase pit.
Figure 19.1. Breton-style monuments: Achnacreebeag and Ballintoy; distribution; Breton-style late Castellic pot from Achnacreebeag; supposed route taken by Breton settlers.
Figure 19.2. Castellic pottery in the Morbihan region of Brittany and in Normandy and some of its ceramic ‘descendants’ in Scotland and Ireland.
Figure 19.3. The Carinated Bowl Neolithic: examples of pottery, and hypothetical route taken by settlers from northern France and their descendants.
Figure 19.4. Antrim porcellanite axeheads (and related implements): complete axe found at Shulishader, Isle of Lewis; distribution as of 1986; Irish distribution as of 1998.
Figure 19.5. Axeheads from hoard of Antrim flint items found at Auchenhoan; pitchstone core from Nappan; map showing directions in which Arran pitchstone travelled during the Neolithic.
Figure 19.6. Clyde cairn at East Bennan, Arran, and court tomb at Creggandevesky, Co. Tyrone, showing the striking similarities between these cognate monuments.
Figure 19.7. Fourth millennium ceramic connections between Ireland and Scotland.
Figure 19.8. Map showing part of the south-west spread of ideas, practices and objects from Orkney towards Ireland at the beginning of the third millennium, highlighting early Grooved Ware and stone/timber circles.

List of tables

Table 6.1. The ^{14}C dates from Polgár-Csőszhalom mentioned in the text.
Table 7.1. Mesolithic and early/middle Neolithic human stable isotope values in south-east Europe.
Table 7.2. Mesolithic and early/middle Neolithic human stable isotope values in Britain and Ireland.
Table 7.3. Average Neolithic human δ^{13}C and δ^{15}N values (± 1 SD) by region from coastal and inland sites in Britain and Ireland.
Table 9.1. Comparison of dryland sites and waterlogged well fills of different LBK sites.
Table 13.1. Selection of radiocarbon dates for Menga and Viera (Antequera, Málaga, Spain).
Table 14.1. Radiocarbon dates mentioned in the text.
Table 17.1. West Kennet palisade enclosures – radiocarbon and stable isotope measurements.
Table 17.2. Radiocarbon and stable isotope measurements from selected English and Welsh palisaded enclosures.
Table 17.3. Radiocarbon and stable isotope measurements from selected English cursus.

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In publishing this volume, the editors, contributors and publishers congratulate Alasdair on his contribution to many aspects of prehistoric archaeology: theoretical, practical and interpretational. His work and his teaching have been inspirational to the discipline as a whole and, in particular, to several generations of students, many of whom have gone on to make their own contribution.

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18

Remembered and imagined belongings: Stonehenge in the age of first metals

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Introduction

Alasdair is first and foremost a scholar of the Neolithic, so an offering for his *festschrift* on events from the later third and second millennium BC demands explanation. So, to follow good legal defence, one can first cite precedence. Alasdair's research has, on occasion, strayed into later periods. Early on this was determined by post-doctoral employment, as with his analysis of the Iron Age pits from Danebury (Whittle 1984), or the writing up and publication with Humphrey Case of a range of later prehistoric and Roman excavations on the Thames Valley gravels around Oxford (Case and Whittle 1982). But even his Cardiff days have seen involvement in projects that took in later archaeology, work on the Severn foreshore being a case in hand (Whittle 1989). The second part of our defence involves a sleight of hand, in that this paper deals with aspects of the life of that most pre-eminent of Neolithic monuments, Stonehenge, albeit in the time of first metals. Bradley has highlighted how the sequence of constructional events at this monument presented an image of timeless order in the face of external change (Bradley 1991), and so even in the Bronze Age it might be fair to say Stonehenge carried with it many of the core concepts of a 'Neolithic' world.

Stonehenge has not escaped Alasdair's attention. The shifting influence of Beaker assemblages and practices within its landscape provides a case study within his critical review in 1981 of late Neolithic society (Whittle 1981). In his 1997 paper, 'Remembered and imagined belongings', Alasdair sought to ascribe meanings to Stonehenge's main lithic phase (phase 3ii of Cleal *et al*. 1995; phase 2 in the revised sequence of Darvill *et al*. 2012). With its focus on understanding the power of tradition, reverence for spirits and ancestral beings, intense ceremonialism, the metaphoric and metonymic qualities of materials, encounter and experience, this remains one of the most insightful and dynamic readings of the monument. It was prescient in several ways, not least in drawing attention to the monument's role as a 'fixed point for the residence of or access to spirits and ancestors, real and imagined' (Whittle 1997, 147), and in being explicit about the links between Stonehenge and contemporary monumental timber constructions, notably the Durrington Walls Southern Circle. Albeit worked from a model shaped by ethnographic analogy published by Mike Parker Pearson and Ramilisonina (1998) a year later, these are themes that lay at the heart of the programme of investigation instigated by the Stonehenge Riverside Project (Parker Pearson 2012; Parker Pearson *et al*. 2006; 2007; 2009). The last two decades have witnessed a remarkable up-scaling in the pace of Stonehenge research and a concordant expansion of knowledge, not least through the work of the Stonehenge Riverside Project, that of SPACES (Darvill and Wainwright 2009), and detailed survey work inside and outside the monument by English Heritage/Historic England (Bowden *et al*. 2015; Field *et al*. 2014; 2015) and international teams (Darvill *et al*. 2013; Gaffney *et al*. 2012). Many elements of Alasdair's interpretation of the monument continue to resonate within these programmes of work, and that is true as much of later events as of Stonehenge's Neolithic heyday,

as we wish to show through a fresh look at events within the period c. 2400–1500 cal BC.

Stonehenge in the Bronze Age

When Alasdair took up post at the then University College, Cardiff, the great sarsen and bluestone circles of Stonehenge were understood to date to the early Bronze Age. The detail of chronology and sequence had been established by his senior colleague, Richard Atkinson, through an extensive programme of excavation at the monument during the 1950s and 1960s (Atkinson 1960). Atkinson's phase II of Stonehenge, with its double bluestone circles, was seen as contemporary with Bell Beaker pottery, while the sarsen and re-set bluestone components of phase IIIa went with the rich Wessex Culture graves of nearby barrow cemeteries, and so

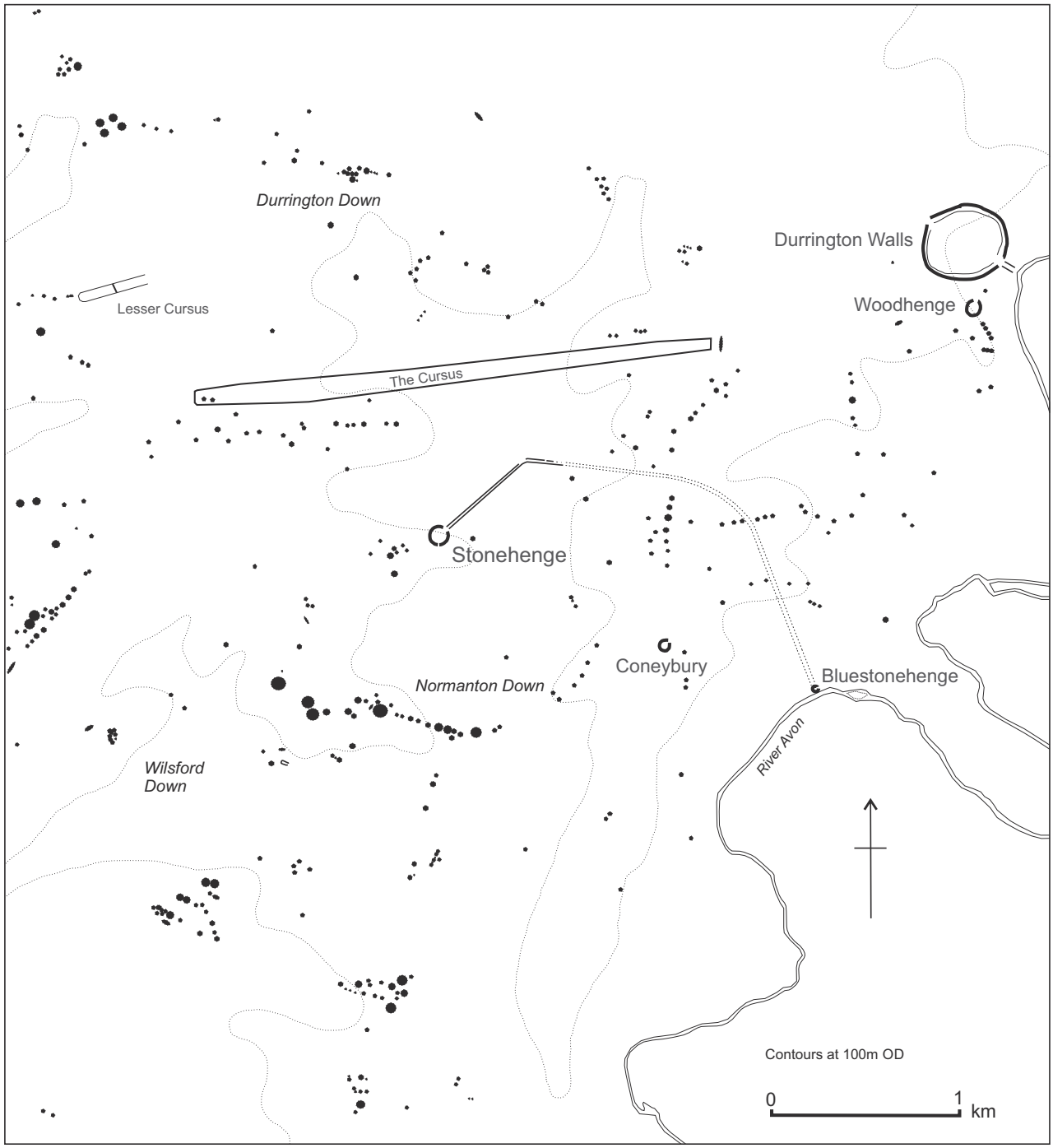

Figure 18.1. Stonehenge and its landscape.

the established early Bronze Age (Atkinson 1960, 90–1).[1] At the time, this early Bronze Age chronology had an internal logic. For Atkinson, only the widely networked 'aristocratic community' represented by the elaborately furnished graves in adjacent Bronze Age round barrow cemeteries (including the famous Bush Barrow burial: Needham *et al*. 2010) 'commanded the resources of labour and craftsmanship necessary to encompass the transport and erection of the sarsen stones' (Atkinson 1960, 91). Further confirmation of the second millennium BC date of the lintelled sarsen circle and trilithon horseshoe was seen to come from the discovery in 1953 of carvings representing bronze axeheads and even a dagger of 'Mycenaean type' on the sarsen uprights of the outer circle and inner trilithons.[2]

By the time of a new programme of analysis and dating during the mid 1990s – linked to the full publication of the twentieth-century excavations of Colonel Hawley and Richard Atkinson (Cleal *et al*. 1995) – Atkinson's chronology was already beginning to look untenable. First had been the impact of the radiocarbon calibration 'revolution' of the late 1960s to early 1970s (Renfrew 1973), which made any talk of Mycenaean contacts, or even Mycenaean architects being involved in the building of the stone phase of the monument, chronologically challenging (Renfrew 1968). The new radiocarbon dates published in the definitive report by Cleal *et al*. (1995) demonstrated conclusively that the major megalithic phase belonged to the final part of the local Neolithic sequence, centring on the middle centuries of the third millennium cal BC. This radically changed the Stonehenge story, firmly placing much of the monument's construction and active life within a late Neolithic world, and demonstrating that those buried in surrounding round barrows had looked upon Stonehenge as a monument already ancient.

Since the mid-1990s there has been substantial further work and refinement. The radiocarbon chronology and structural sequence have been subject to further analysis (Darvill *et al*. 2012; Parker Pearson *et al*. 2007), while work by the Stonehenge Riverside and SPACES projects has provided important new detail relating both to the monument and events in the surrounding landscape (Fig. 18.1). It now appears likely that the smaller bluestones that make up horseshoe and circle settings within and between the larger sarsen trilithons and outer circle may have first been brought to Stonehenge close to 3000 cal BC from a south Welsh source 270km distant (Parker Pearson *et al*. 2015). A smaller circle of bluestones was erected at the same time or rather later adjacent to the River Avon 2km to the south-east at Bluestonehenge. From this point until the middle of the third millennium cal BC, Stonehenge acted as a large cremation cemetery, possibly for individuals of a pre-eminent lineage that traced its ancestry through real or fictive lines to early Neolithic communities of south-west Wales (Parker Pearson *et al*. 2009; Willis *et al*. 2016). However, the most dramatic transformation of what was already a remarkable monument occurred around 2500 cal BC (Stage 2), when the large sarsens were brought from the Marlborough Downs 30km to the north, dressed, and erected to form the lintelled outer circle and inner trilithon horseshoe settings that provide the iconic image of Stonehenge. At this stage the bluestones from both the earlier surrounding Aubrey Holes and Bluestonehenge were reset as a double circle inside the sarsen circle. One possibility is that the whole was built from inside to out in quick succession – sarsen trilithon horseshoe; double bluestone circle; and outer sarsen circle; with the recumbent sandstone 'Altar Stone' at the near centre.

The resulting monument was unique, at least as far as megalithic structures are concerned. Its architecture copied the format of contemporary timber circles such as those to the east on the Avon riverside at Durrington Walls and Woodhenge, which in turn may be seen as massively elaborated versions of late Neolithic houses (Bradley 2005; Pollard 2009). Stonehenge had been remodelled as the 'great house' or hall of a pre-eminent ancestral community. The monument formed the focus of a wider late Neolithic 'ceremonial' landscape. For a period of time around 2500 cal BC, the Stonehenge-Bluestonehenge-Durrington-Woodhenge complex was the setting for ceremonies surrounding the translation of the newly dead into ancestors (Parker Pearson and Ramilisonina 1998). The timber monuments at Durrington Walls and Woodhenge were the locations for periodic gathering and feasting, timed to coincide with the winter solstice (Craig *et al*. 2015), while the lithic settings at Stonehenge and Bluestonehenge retained a close association with funerary and ancestral domains (Parker Pearson 2012).

Times they are a' changing

By the time of Stage 2 the wider world was beginning to change. The British late Neolithic was curiously insular, if, surprisingly, internally culturally homogeneous (Thomas 2010). Stonehenge Stage 2 belonged to a British Isles-wide tradition of major circular monuments built of stone and timber, some enclosed in circular 'henge' earthworks, linked to distinctive forms of ceramic known as Grooved Ware and economies reliant to varying degrees on pastoralism (Stevens and Fuller 2012). However, the decades around 2500 cal BC witnessed the re-establishment of sustained contacts with continental Europe, brought about through the expansive networks linked to the Bell Beaker phenomenon. Marking the time of the first metals, British prehistorians are increasingly recognising this horizon (c. 2450–2200 cal BC) as a distinct 'Chalcolithic' (Allen *et al*. 2012). Initially, changes in material culture (the introduction of metals and textiles, a change from Grooved Ware to Beakers, etc.), burial practice (a move towards individual inhumation),

subsistence (greater reliance on cereal cultivation) and so forth were gradual (Needham 2005). The earliest Beaker presence in the Stonehenge landscape was thinly distributed and not closely clustered around the monument (see Whittle 1981 for an early appreciation of this pattern). The now well-publicised burials of the Amesbury Archer and Boscombe Bowmen, several of whom began their lives well outside the region, and who date to the twenty-fourth and twenty-third centuries cal BC, are located c. 5km from Stonehenge on the opposite side of the River Avon (Fitzpatrick 2011). They have no especial claim to be linked to the monument, beyond the 'draw' that Stonehenge may have exerted on pilgrims or travellers to visit the region. Other early burials are likewise widely scattered in the locality. At least one other early Beaker burial comes from the largest Beaker cemetery in the region, under and around the round barrow Wilsford G1. At least 15 individuals, including seven infants, were buried here (Leivers and Moore 2008). While located just 1.3km to the west-south-west of Stonehenge, the cemetery lies beyond that monument's visual envelope – again, a cautious presence. Sherds of early Beaker are found in only small numbers at Stonehenge, Durrington Walls and Woodhenge (Cleal and Pollard 2012).

In the centuries following the major rebuilding represented by the late Neolithic Stage 2, Stonehenge would undergo further modification. This was never on the same scale, yet its very occurrence testifies to the continuing role the monument played in the ceremonial life of communities both within southern Britain and further afield. While it is always tempting to equate scale of constructional activity with relative levels of ceremonial/sacred significance – such that the massively labour-intensive Stage 2 comes to represent the pinnacle of the site's status, followed thereafter by more minor structural modifications marking a slow decline in that significance – this may be erroneous. As Needham *et al*. (2010, 4) point out, 'there are good grounds for believing that the monument was still of critical religious importance to the communities of the mature Early Bronze Age'. Later third and early second millennium BC transformations of the earthwork and stone settings were enough to episodically reanimate and reinstate the site's preeminent sacred role, yet not so drastic that the fundamental form of the Stage 2 sarsen and bluestone monument was lost. The implication is that a certain historic potency and/or recognisability (a 'sacred brand', if you like) became attached to the sarsen outer circle and inner trilithons, making their removal or substantive modification an unthinkable act.

Within the monument. Chalcolithic and early Bronze Age modification and activity

Several episodes of constructional modification have been defined as belonging to the period 2400–1450 cal BC (Cleal *et al*. 1995; Darvill *et al*. 2012). It is important to recognise not just the character and significance of events at the monument itself, but those taking place within the local landscape and beyond. As Richard Bradley has eloquently described, there is a certain tension between the strands of continuity seen at Stonehenge itself and the major material and ideological transformations taking place in the world around it. No more dramatic illustration is provided than by the appearance of the numerous cemeteries of round barrows (over 670 barrows in total: Darvill 2006, 164) that gradually came to ring the monument over the period 2200–1500 BC (Woodward and Woodward 1996). These served to articulate inter-group relationships, sanction claims of access to areas of landscape (and the monument itself) and symbolise the inter-generational success of certain lineages (Garwood 2007). Bradley suggests that the tension between apparent continuity at the monument and major changes in its environs was mediated through different projections of time within separate spheres of practice (Bradley 1991; 1998). A mundane time of the world around operated alongside a ritual time that emphasised repetition and continuity in the sacred that was embodied by Stonehenge. Of course, such a distinction in 'types' of time was likely situational rather than absolute, and we might, too, envisage other forms of conceptualising temporal frameworks, especially related to successive barrow burial and lineage formation.

The latest iteration of Stonehenge's sequence prepared by Darvill *et al*. (2012) identifies three stages (3–5) belonging to the Chalcolithic and early Bronze Age. Together they span c. 900 years, or c. 36 generations, which might usefully be compared with the c. 600 years or c. 24 generations of construction and activity leading up to stage 3.

Stage 3 (2405–2225 to 2300–2100 cal BC)

Stage 3 belongs to the currency of early Beakers (Fig. 18.2). During this time the stone settings at Bluestonehenge by the River Avon were dismantled and probably taken to Stonehenge where they were set up as a central circle enclosing the Altar Stone. The process added an extra layer to the heart of the monument, and in plan at least it came to resemble more closely the great multiple timber circles at Woodhenge and the Southern Circle, Durrington Walls (Cunnington 1929; Thomas 2007; Wainwright and Longworth 1971). Other modifications included the removal of two of three Stage 2 sarsens at the main north-east entrance; the re-cutting of the earthwork ditch; and the creation of the bank and ditch of the Avenue, linking Stonehenge to the site of Bluestonehenge and the Avon at West Amesbury, 2.8km to the south-east. At around the same time, the sites of the circle at Bluestonehenge and of the erstwhile timber rings of Woodhenge were enclosed by henge earthworks (Pollard and Robinson 2007). All of these activities were bound up in the marking or enclosing of locations and routeways of existing significance, and

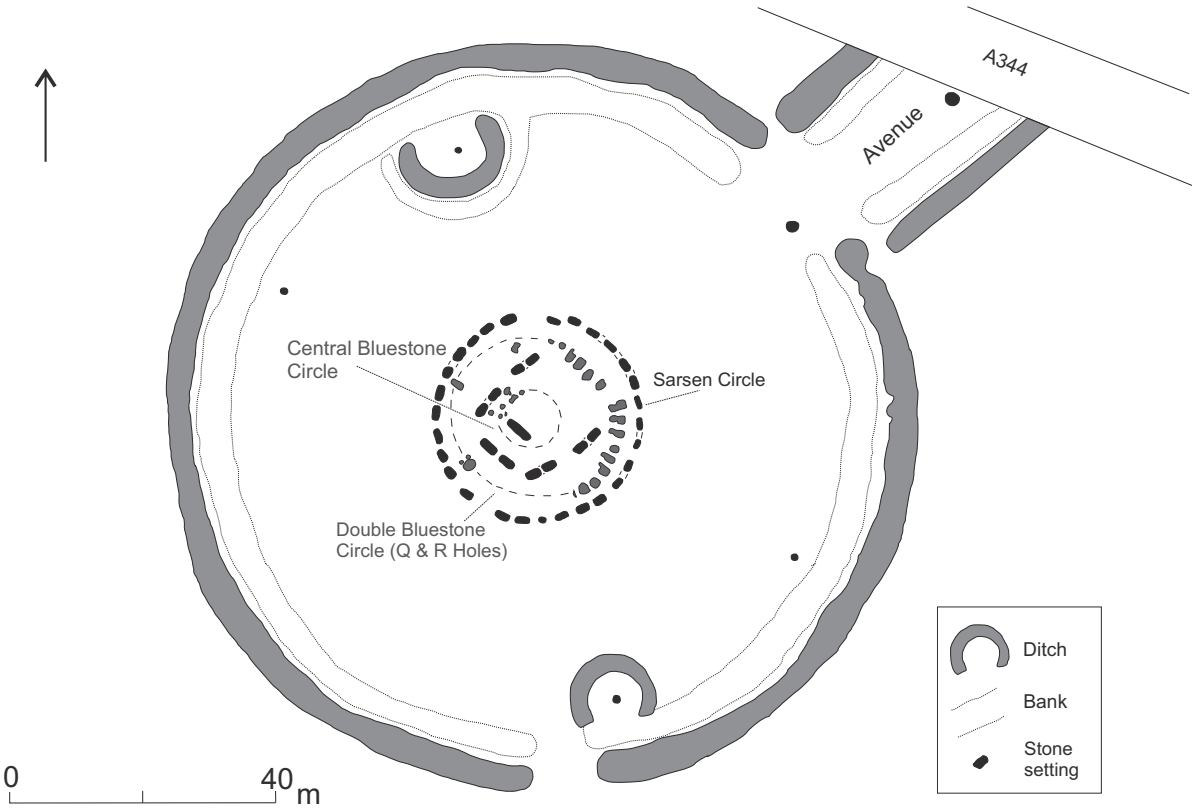

Figure 18.2. Principal features of Stonehenge Stage 3 (after Darvill et al. *2012).*

can productively be viewed as processes of 'wrapping' potent media (Richards 2013, 16–23), both responding to and enhancing their sacredness, and reinforcing the ontological contrast between these spaces and the landscape outside.

Stage 4 (2210–2030 to 2160–1925 cal BC)

The next major transformation occurs in the last two centuries of the third millennium cal BC, and again involves the bluestones (Fig. 18.3). The double circle of Stage 2 and central circle of Stage 3 were dismantled and reset as a dolerite oval within the trilithon horseshoe (2205–1920 cal BC) and as a circle of 40–60 close-set pillars between the horseshoe and outer sarsen circle (2275–2030 cal BC).

Human burials ceased to be placed within the monument, and Stonehenge's dead were now becoming a metaphysical rather than physical presence. The remains of the newly-dead were now inhabiting the landscape outside the monument. A number of Beaker barrows provided the focus for the emergence post-1900 BC (Garwood 2007) of sometimes extensive linear barrow cemeteries. The immediate viewshed from Stonehenge is ringed by three of the most important of these – the King Barrows to the east, the Cursus group to the north-west and Normanton Down to the south (Cleal *et al*. 1995, 34–7). The shift away from burial in the monument fits into a wider trend, and perhaps reflects a greater imperative to use the dead as a resource for making visible statements about access to and rights of tenure over blocks of land. This shift may increasingly have marked Stonehenge as a monument redolent of a sacred authority invested in a deep ancestral past.

Stage 5 (2010–1745 to 1620–1450 cal BC)

The final substantive modifications to Stonehenge (other than later depredations) took place during the established early Bronze Age, at a time when the region's round barrow cemeteries were well established (Fig. 18.4). So far as we are aware, changes to the monument's fabric during this time did not involve the resetting of stones. Rather, two rings of oval and sub-rectangular pits were dug enclosing the stone settings. Known as the Y and Z Holes, these are among the most perplexing of the monument's features. Dates suggest the inner Z Holes were created first, in the period 2030–1750 cal BC (Cleal *et al*. 1995, 264); with the Y Holes belonging to 1640–1520 cal BC (Cleal *et al*. 1995, 260–4, 533). Their similarity in form and dimension, and their paired arrangement, is remarkable if their creation is truly

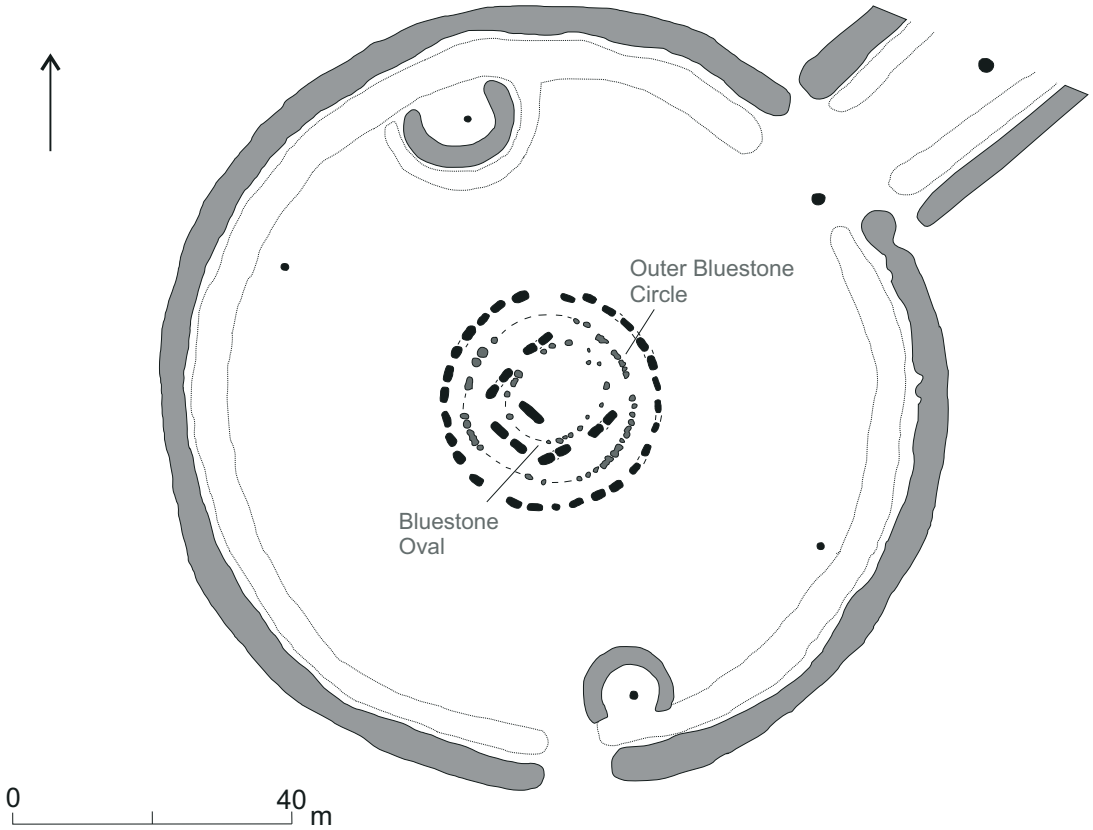

Figure 18.3. Principal features of Stonehenge Stage 4 (after Darvill et al*. 2012).*

separated by c. 100–500 years. However, the irregularity in plan and section of several of the Y Holes (e.g. YH1, 4, 7, 16 and 29) suggests they cut earlier features set out on the same circuit, so available dates may relate to their reworking rather than initial creation. As Richards (2013, 20) astutely observes, 'tradition is strong and critical thought weak in the extraordinary interpretation of … the Z and Y Holes'.

The end of burial, and small things forgotten

Alongside the periodic movement and re-erection of stones, later the digging of rings of pits, were other practices that saw engagements with substances, both physical and metaphysical, within the space of the monument. These highlight a certain motion, vibrancy, or life to Stonehenge during this time that makes it reasonable to infer its conceptualisation as an animate form rather than inert memorial. There is also both retained unity (Stonehenge as icon) and significant shifts in the way the monument, people and things interacted: notably, a move away from the incorporation of human remains post-2200 cal BC to the deposition of ceramics, the creation of rock art, the felling, fragmentation and distribution of certain stones and the establishment, or rather reinforcement, of a second solstitial axis that took in the midwinter sunrise. As we shall show, many of these practices served to reference or even co-opt features of other monuments, some contemporary, others increasingly ancient. Through this, Stonehenge became an ever more powerful repository of presence.

It is during Stage 3 that Stonehenge's long-standing role as a locus for human burial comes to an end, but in rather dramatic fashion. The latest identified interment is of an adult male killed by multiple arrowshots, placed in a grave cut into the ditch just to the north-west of the main entrance (dated to 2340–2195 cal BC; Evans 1984). A second, disturbed, burial in the centre of the monument may be of this date since sherds of fine Beaker were found in loose association (Cleal *et al*. 1995, 265), but the evidence remains sketchy at best. The burial of the adult male within the ditch remains an ill-understood event, especially since the violent end to this individual's life could imply sacrifice or over-kill. His interment against the principal entrance certainly implies an elevated status, either in life or as an object of offering. Rarely commented on are other instances of single burial, of adolescents and adults, of comparable date and context from the henge monuments at Avebury

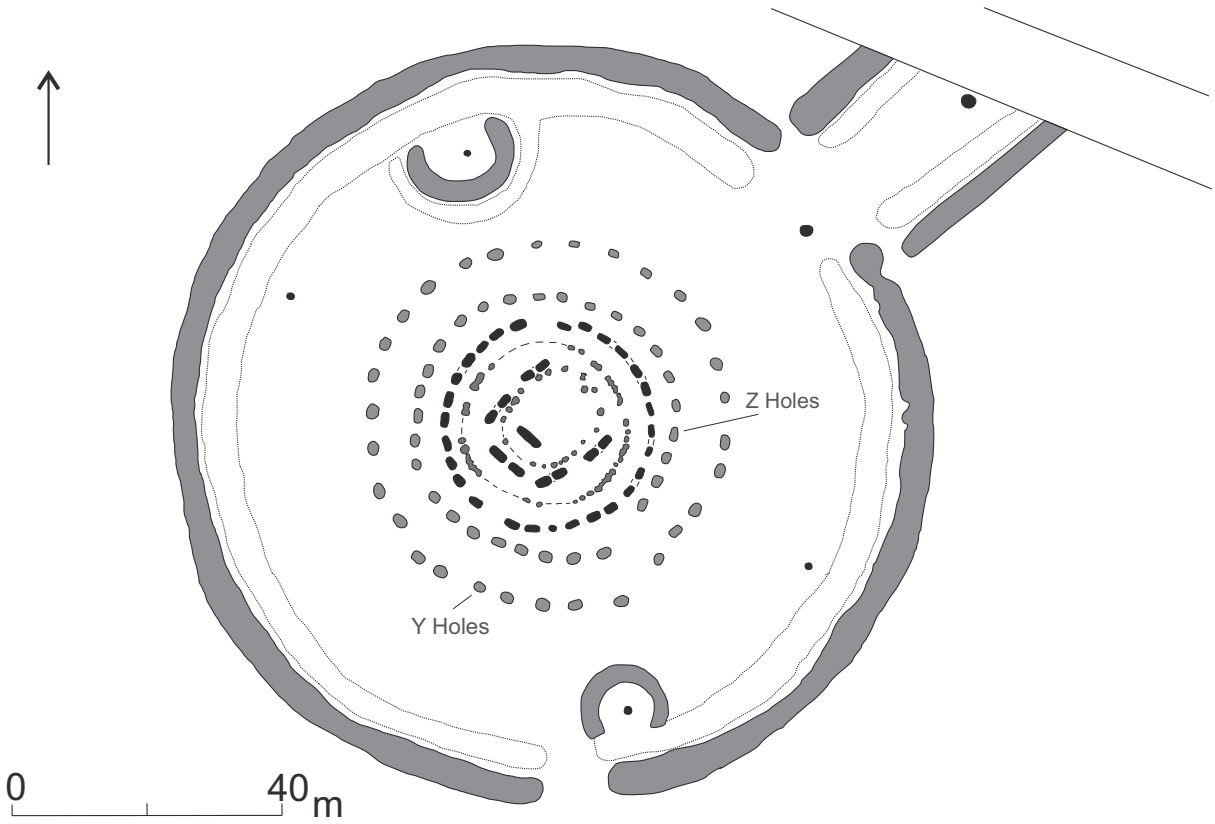

Figure 18.4. Principal features of Stonehenge Stage 5 (after Darvill et al. *2012).*

(southern entrance: Gray 1935), Marden (north entrance: Wainwright 1971) and Wilsford (Jim Leary *pers. comm*.). These individuals were also interred in the terminals of ditches flanking major entrances, and represent one-off acts rather than foundational events for new sequences of burial. It is tempting to see them as related. Perhaps quite public affairs, and located at key points of transition between enclosed sacred spaces and the world beyond, each burial formed an act that created a heightened sense of incorporated memory (cf. Rowlands 1993). We suggest they were intended to effect a transformation, conceivably relating to the ontological status of each monument, as a form of consecration or re-dedication, if such terms are appropriate. That at Stonehenge belongs to a critical horizon where Beaker-related cultural practices were becoming more assertive (Needham 2005), and its enactment may have served to mediate and facilitate new kinds of engagement with a monument deeply rooted in an old order. From this point on there are certainly changes in activity reflective of new forms of materiality, seen most conspicuously in the beginning of a long tradition of ceramic deposition, manipulation of bluestone and, rather later, the creation of carvings of axes and daggers.

Pots and bluestones

For the first six or seven centuries of its life, little ceramic material was deposited at Stonehenge (Cleal *et al*. 1995, 350–3). This is in stark contrast to the quantities of later Neolithic Grooved Ware found in the contemporary monuments of Woodhenge and Durrington Walls, suggesting that it was simply inappropriate to utilise and deposit pottery (which at this time lacked a funerary association) at a monument connected to the dead (Parker Pearson and Ramilisonina 1998). Beaker and early Bronze Age ceramics (Food Vessels, Collared Urns, etc.) were deployed in a broader range of practices, which included their use in domestic domains and as vessels to accompany or act as containers for the deceased. This shift in their currency now made their use within the monument possible, perhaps as components of rites associated with ancestral veneration or funerary commemoration. Certainly their deployment was structured or prescribed. The distribution of Beaker and early Bronze Age urn sherds is far from random, and picks out significant axes within the monument (Fig. 18.5). The main concentration occurs around the north-east (i.e. front/entrance) of the stone settings (cuttings C2 and C12), with secondary concentrations within the south-eastern area of

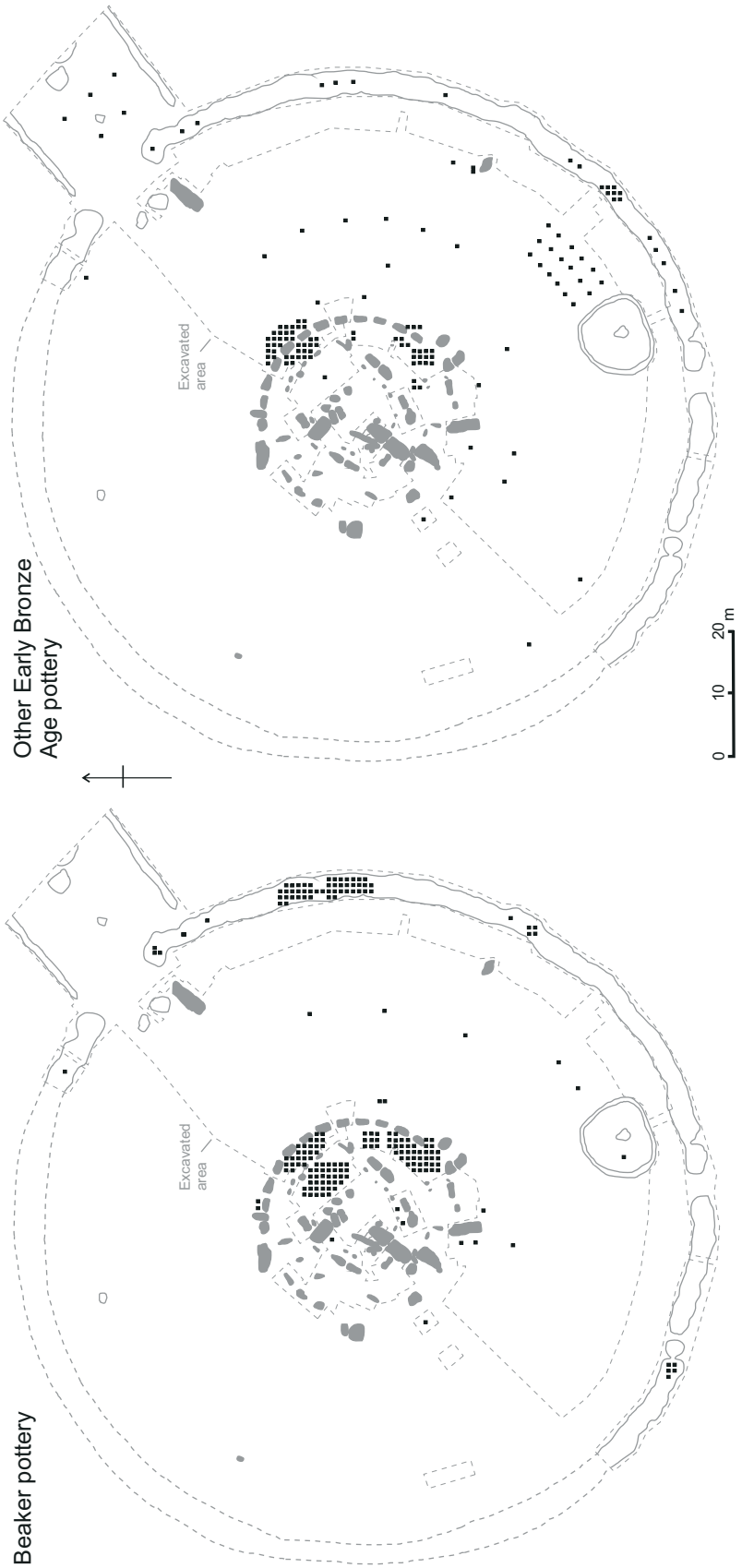

Figure 18.5. The distribution of Beaker and early Bronze Age ceramics within Stonehenge.

the stone settings between the outer bluestone circle and sarsen circle, and within the eastern sector of the ditch where a wide gap currently exists in the bank. Tellingly, pottery is absent from that part of the western interior investigated through excavation.

It remains unclear whether pottery was brought in as complete vessels or as sherds. Elsewhere there is evidence of Beakers being deposited on Neolithic monuments as fragments following potentially complex pre-depositional treatment (Wilkin 2016), and this may be true of Stonehenge. If so, they were not the only fragmentary things in action. Around the same time that ceramic depositions were taking place there are indications of certain bluestones being intentionally broken and the fragments variously circulated around the landscape and used to create stone tools (Montague in Cleal *et al*. 1995, 375–86). The motivations behind this are unclear, though need not imply disrespect, nor that the monument's power and importance was faltering, since pieces of bluestone may have been sought for their perceived efficacy generated by association with the monument or their own inherent power. Some of those distributed fragments come from areas of contemporary settlement, such as the zone around the western end and to the north of the Cursus (Richards 1990, 230–1; Stone 1947, 17). One could think of scenarios in which fragments of pots and fragments of stones circulated into and out of the monument, respectively, operating within a cycle of enchainment (Chapman 2000). In this way the monument was connected to places of the living (and even specific people or communities), and pieces of the lived world were brought back into Stonehenge. That cycling and ultimate consumption or absorption of materials through deposition could work into deeper metaphoric ideas of transformation and regeneration, of people and substances, in much the same way as Brück (2006) has argued for the middle and late Bronze Age. Potential exists to see these material practices as a component or extension of funerary rites taking place elsewhere in the landscape, with pottery sherds acting as tokens of the recently deceased which were 'enshrined' within a monument whose connection with the dead remained strong.

The axehead and dagger carvings

While fragments of physical objects were deposited around the megalithic settings, images of others were worked on the surfaces of stones. They are among the more unusual features of this striking monument (Fig. 18.6). Representations of around 115 metal axeheads and three daggers were carved onto the outer faces of stones 3, 4 and 5 of the outer circle and the inner face of stone 53 of the trilithon horseshoe, while a single dagger is present on the south-west face of Stone 23 (Lawson and Walker in Cleal *et al*. 1995, 30–3; Field *et al*. 2015, 141). The greatest concentrations are on stone 4 (a minimum of 60 axes) and stone 53 (a minimum of 37 axes, plus two daggers). All the axeheads are shown unhafted, while the daggers have hilts; a distinction which must have significance. If accurate representations (which many are clearly not), the axes are typologically of Arreton Down type, dating to 1750–1500 cal BC, and so Stage 5. Such carvings are exceptionally rare in a British Bronze Age context, and the few parallels that are known (from cist slabs near Kilmartin, Argyll, and on a sandstone block from the Badbury Barrow, Dorset) have explicit funerary associations (Lawson and Walker in Cleal *et al*. 1995, 33). A connection with mortuary rites might be further reinforced by the aspect

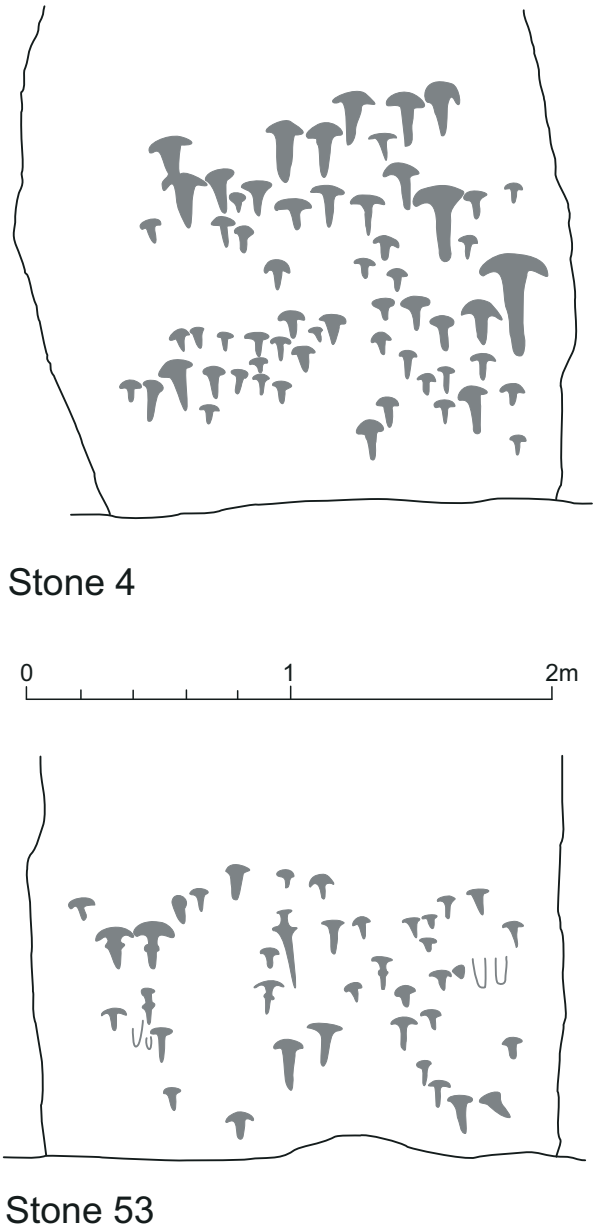

Figure 18.6. Axe and dagger carvings on stones 4 and 53 (after Bowden et al*. 2015; Field* et al*. 2015).*

of the carvings, which face out towards Amesbury 11 and the mounds on King Barrow Ridge (Field *et al*. 2015, 141); though this is a rather 'target heavy' landscape when it comes to barrows and so this apparent relationship may not hold significance.

While connections exist with carvings on cist slabs, those on Stonehenge remain unique in terms of their sheer number and association with a major ceremonial monument. Not only is their presence highly unusual, but their position on the stones would be odd if the intention was simply for them to act as visible symbols within a conventional representational reading. Many are worked very low down on the face of the stones, some almost at ground level, in a position that must have been awkward to effect. The carvings on stone 53 extend from close to ground level to a height of c. 1.2m, and those on stone 4 up to 1.6m, a good proportion being below waist level. Set blade up, the impression given is of the axeheads *emerging* out of the ground. Those on stones 3–5 look to work as a single, domed, composition. Within each 'panel' the axeheads describe diagonal lines or arcs, while some multiples (for example on the lower left and right of stone 4) are clustered as if in groups or sets. There is a sense of relational connections being established between individual images, much the same way as they might with people in lineages, animals in herds, beads in necklaces, or barrows in cemeteries, for instance. Or, as in axe hoards. Subtle yet potentially significant differences also exist in the form of images according to their location, such that larger axeheads are present on stone 4 and ones with medial projections on stone 53. An obvious conclusion is that the images are multi-authored, and potentially accretive, though this is impossible to establish.

As with all unique or near-unique phenomena in prehistory, their interpretation is taxing. One line of explanation would see them as tallies of sorts, marking major funerary or ancestral ceremonies held at the monument, perhaps with dagger images indexing events of a more significant or different order. Or they could be a proxy for labour and participation, especially in the light of the evidence for around 51 axes (and so people?) being used in the construction of the early Bronze Age timber circle at Holme-next-the-sea, Norfolk (Brennand and Taylor 2003, 22). Pitts (2000, 297–8) suggested female and male links for the axeheads and daggers, and a connection to powerful, even deified, people. This leads to another conclusion that takes into account their unusual positioning, namely that they allude to a process of emergence – of entities rising out of the ground from an underworld. This could play on a broader emic conception that linked the forces behind the production of metalwork with non-human agencies and qualities of transformation, regeneration and durability held in common with spirit worlds (cf. Budd and Taylor 1995). Could we think of the carvings as axe/spirits, human spirits as axes, or even the spirits of axes?

Rings of pits and solstitial alignments

Both the circulation and deposition of pottery and pieces of bluestone, and the creation of the axehead and dagger carvings, materialised connections and afforded ways in which the monument remained an animate entity – the powerful and potent focal point which held this landscape together and provided its renown. So far we have dealt with small things and small acts, yet these are set against larger-scale transformations within the monument and the surrounding landscape. Scaling up, we will look first at the monument and the creation of the Y and Z Holes and changes made to work in a better defined axis that took in the midwinter sunrise.

The Y and Z Holes represent the last major structural transformation of the monument, aside from later depredations. The two rings of sub-rectangular pits, set in circles of 38m (Z) and 53m (Y) diameter, enclose the earlier stone settings. Darvill *et al*. (2012, 1038) suggest that some or all of the holes held small stones that were subsequently removed, but while the shape of the holes is consistent with such a function, they lack clear traces of having held megaliths (e.g. remnant packing collapsed back into their fills). Fragments of rhyolite and occasional dolerite and sarsen were recovered from their bases and primary fills, leading Richard Atkinson (1960, 84) to consider these stone fragments 'as propitiatory token offerings, made as symbolic substitutes for the bluestones themselves'. Pitts draws attention to their grave-like shape and combines the evidence of Y and Z Holes, axehead and dagger carvings and the nearby Bush Barrow burial to suggest Stonehenge had become 'an extraordinary version of something everyday, the burial mound' – the symbolic tomb of a 'god' 'enclosed by two rings of thirty graves' (Pitts 2000, 297).

It may be better to consider their overall effect rather than individual feature function. In Richards' words, their creation served to '*unify* the diversity displayed in the inner skins [of stone]' (Richards 2013, 20). That process of unification extends to the striking spatial relationship the Y and Z Holes hold with the sarsens of the outer circle. They are positioned in such a way that they are paired, albeit occasionally erratically, with stones of the circle. Further 'wrapping' the sarsen and bluestone settings, the addition of the Y and Z Holes takes the number of rings forming the monument to six – bluestone oval, trilithon horseshoe, bluestone circle, sarsen circle, Z Holes and Y Holes – replicating the six-ring format seen with the earlier timber monuments of Woodhenge and the Southern Circle (Cunnington 1929; Thomas 2007). Connections with these monuments, which had been there from phase 2, were still actively evoked at this stage. Significantly, the postholes of the major timber rings making up both of those monuments had been recut as pits over a period of time that extended into the early second millennium BC (Parker Pearson *et al*. 2009; Thomas 2007). The cutting of the Y and Z Holes was likely citing

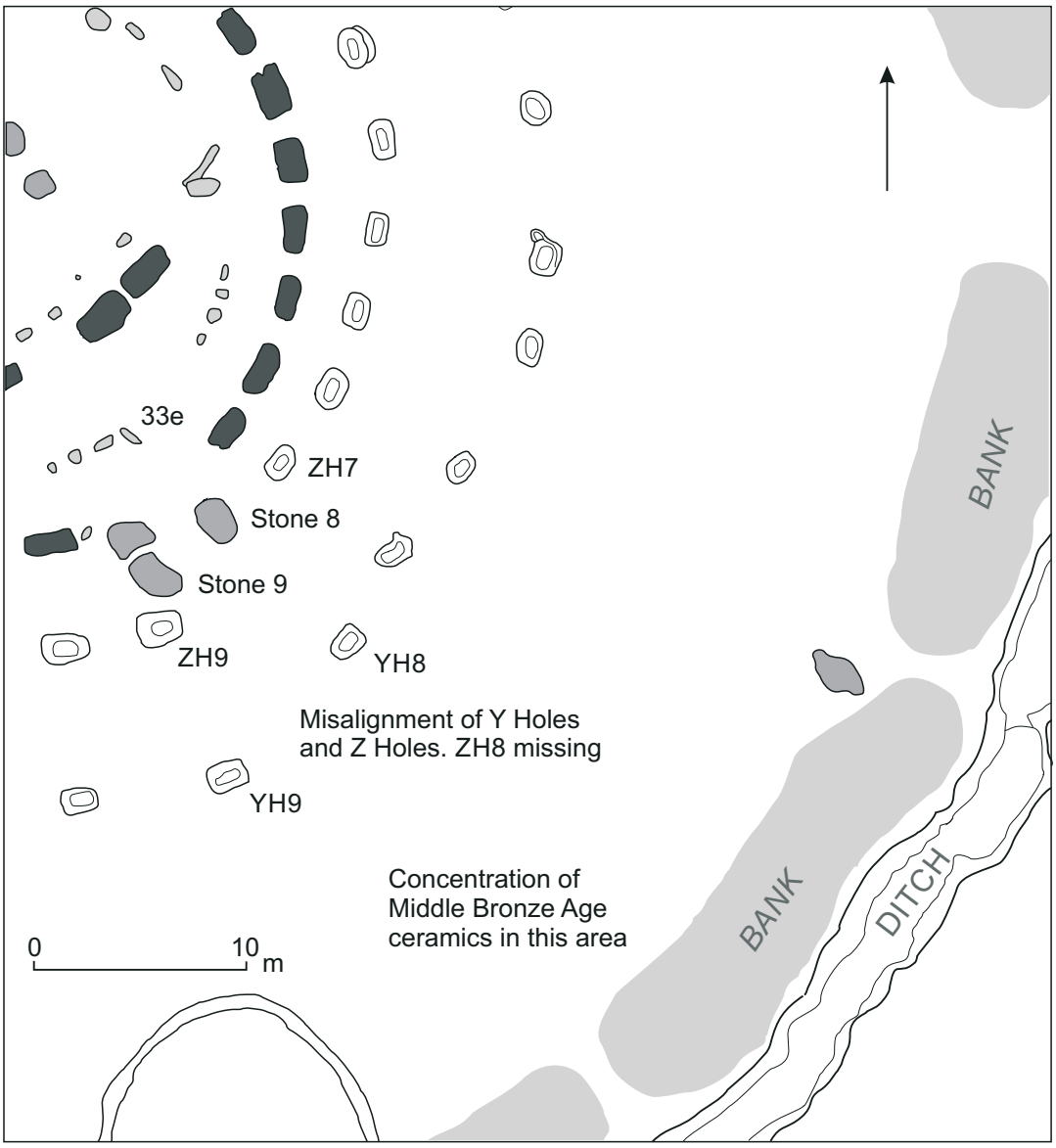

Figure 18.7. Detail of the south-eastern sector of Stonehenge during Stages 4 and 5, showing features related to the marking of the midwinter sunrise and/or southernmost moonrise.

a process in which sites were turned from formerly post to pit monuments (Darvill 2006, 161–4). Around the same time a number of the region's round barrows incorporated constructional stages that involved the digging of pit circles. There are a striking number of these, several revealed through recent geophysical survey (Darvill *et al*. 2013; Gaffney *et al*. 2012), suggesting a particular regional tradition, conceivably one that mimicked on a small scale the pit rings of larger monuments with deep histories, Stonehenge and the Southern Circle being paramount. One such pit circle, at Durrington 67 to the south of Woodhenge, was partially excavated by the Stonehenge Riverside Project. Here, a ring of ten pits with a diameter of just under 30m was cut through by the second phase ditch of a round barrow with primary Beaker associations. Creating the Y and Z Holes did not just unify the stone architecture of Stonehenge, but via consciously referenced connections with and between other pit circles, a certain unity of practice was extended across this landscape.

The Y and Z Holes do not describe perfect circles. They spiral in slightly if followed in a clockwise fashion, a major dislocation occurring in the south-east sector between YH8 and 9 and ZH7 and 9 where the wide spacing of c. 6m in the Y Hole circuit implies an 'entrance'. ZH8 is also apparently missing. There is a strong likelihood that the digging of the holes began and ended in this so spiralin slightly if followed in a clockwise uth-east area. Furthermore, the Y Hole circle

between YH5 to 9 is notably flattened, as if forming a façade or the 'in-fill' of a wide entrance gap. YH7 certainly is very shallow and unfinished in appearance (Cleal *et al*. 1995, table 19). There are other peculiarities to this part of the circuit which go back to Stage 2, if not earlier, so the 'dislocation' in the Y and Z Holes simply picks up and reinforces an already ancient distinction afforded to this part of the monument. Of note is the setting of stones 10 and 11 of the Q/R Holes in separate pits, rather than the more normal dumb-bell arrangement, the positioning of stone 33e of the bluestone circle at an acute angle to others in this setting, and the way stones 8 and 9 of the sarsen circle have fallen outwards (Cleal *et al*. 1995, 485; Pitts 2000, 263–5). Both of the latter 'fell' early (Atkinson 1960, 34, 83; Cleal *et al*. 1995, 194), which likely explains the apparent absence of ZH8 and the off-set position of ZH9. But did these stones fall, or were they pushed?

We would argue for intentional and controlled toppling of stones 8 and 9 of the sarsen circle at some point during the early Bronze Age; and that this was undertaken in order to establish, or rather reinforce, an alignment on the midwinter solstice sunrise as viewed from the area of the Altar Stone and great trilithon. As Daw (2015) has recently argued, such a solstitial alignment was built into elements of the Stage 2 monument: the great trilithon, the 'terminal'/back edge of the bluestone horseshoe (defined by visible elements stones 66 and 68) and the prone Altar Stone all incorporate a 10 degree skew from the true perpendicular, as defined by the main north-east to south-west axis. Their alignment is in accord with an observed line of sight on the midwinter sunrise when seen alongside rather than through the great trilithon, or, using stone 33e as an outlier, along the recumbent Altar Stone. However, during stage 2 this solstitial alignment was very much secondary to that on the midsummer sunrise/midwinter sunset as defined by the principal axis of the sarsen settings and north-east entrance and Avenue. However, by the early second millennium BC matters had changed. The Durrington Walls Southern Circle, which incorporated a principal midwinter sunrise alignment, and Stonehenge no longer operated as elements within a single ceremonial complex. All major solstitial alignments had to be incorporated and condensed within Stonehenge, and since that on the midwinter sunrise remained of critical significance it had to be given additional emphasis through changes to the architecture of the monument. Perhaps the will or resources were not on hand to effect a major phase of rebuilding of this part of the sarsen circle, but structural changes were made, including the outward and presumably carefully controlled toppling of stones 8 and 9 to form a portal into the stone settings. Acts of deposition pick up this reinforced axis. The main concentration of middle to late Bronze Age pottery is in this area, around stones 8 and 9, in YH8, across the interior space between the stone settings and ditch here, and in the adjacent section of ditch (Fig. 18.7). It is likely that Stonehenge's long-standing north-east/south-west solstitial axis retained its significance, but was now fully complemented by that to the north-west/south-east and the rising of the midwinter sun.

Outside the monument. Early Bronze Age settlement and the enclosure of Stonehenge

Mention has been made of the numerous round barrow cemeteries that came to develop around Stonehenge during the course of the latest third and early second millennia BC, but it would be a mistake to regard this as a landscape reserved solely for funerary and ceremonial activity. Throughout the Neolithic and Bronze Age the Stonehenge landscape was also the focus for settlement, sometimes substantial and periodically augmented by large numbers of people coming into the region to engage in seasonal gatherings, monument building and ceremony. For the late Neolithic (c. 3000–2450 cal BC) we can map the extent of settlement through the presence of chronologically distinctive tools in lithic scatters (e.g. chisel and oblique arrowheads), Grooved Ware pits and, rarely, houses, as at Durrington Walls (Parker Pearson 2007). These display a broad distribution, running along the Avon riverside from north of Durrington Walls to Coneybury Hill, with other foci along King Barrow Ridge (overlooking Stonehenge), just to the west of the monument, and north of the Stonehenge Cursus (Richards 1990, 270–1).

Beaker and early Bronze Age settlement occurred within many of the same zones, but, critically, there are areas where it was now absent (Fig. 18.8a). Evidence of settlement during this period is well attested on higher ground to the east of Amesbury on the other side of the River Avon at Butterfield and Boscombe Downs, where the Amesbury Archer and Boscombe Bowmen burials are located (Fitzpatrick 2011; Rawlings and Fitzpatrick 1996). Other zones can be identified through the results of surface collection and test-pitting undertaken by the Stonehenge Environs and Stonehenge Riverside Projects (Richards 1990; Parker Pearson 2012), including a broad swathe over 2km long running from the west of Stonehenge, up to and beyond the western end of the Stonehenge Cursus/Fargo Wood and to the east on Durrington Down. Beaker, Food Vessel and Collared Urn ceramics have all been recovered from this zone (Richards 1990, 33). There is also a marked concentration of early Bronze Age worked flint and ceramics from Wilsford Down to the south of the Winterbourne Stoke Crossroads barrow group. It is significant that all these areas were later occupied by middle Bronze Age co-axial field systems, indicating a degree of settlement stability across much of the second millennium BC (Fig. 18.8b).

What is striking is the sparsity of settlement evidence from the areas to the east of Stonehenge that were intensively exploited during the late Neolithic (e.g. Coneybury Hill,

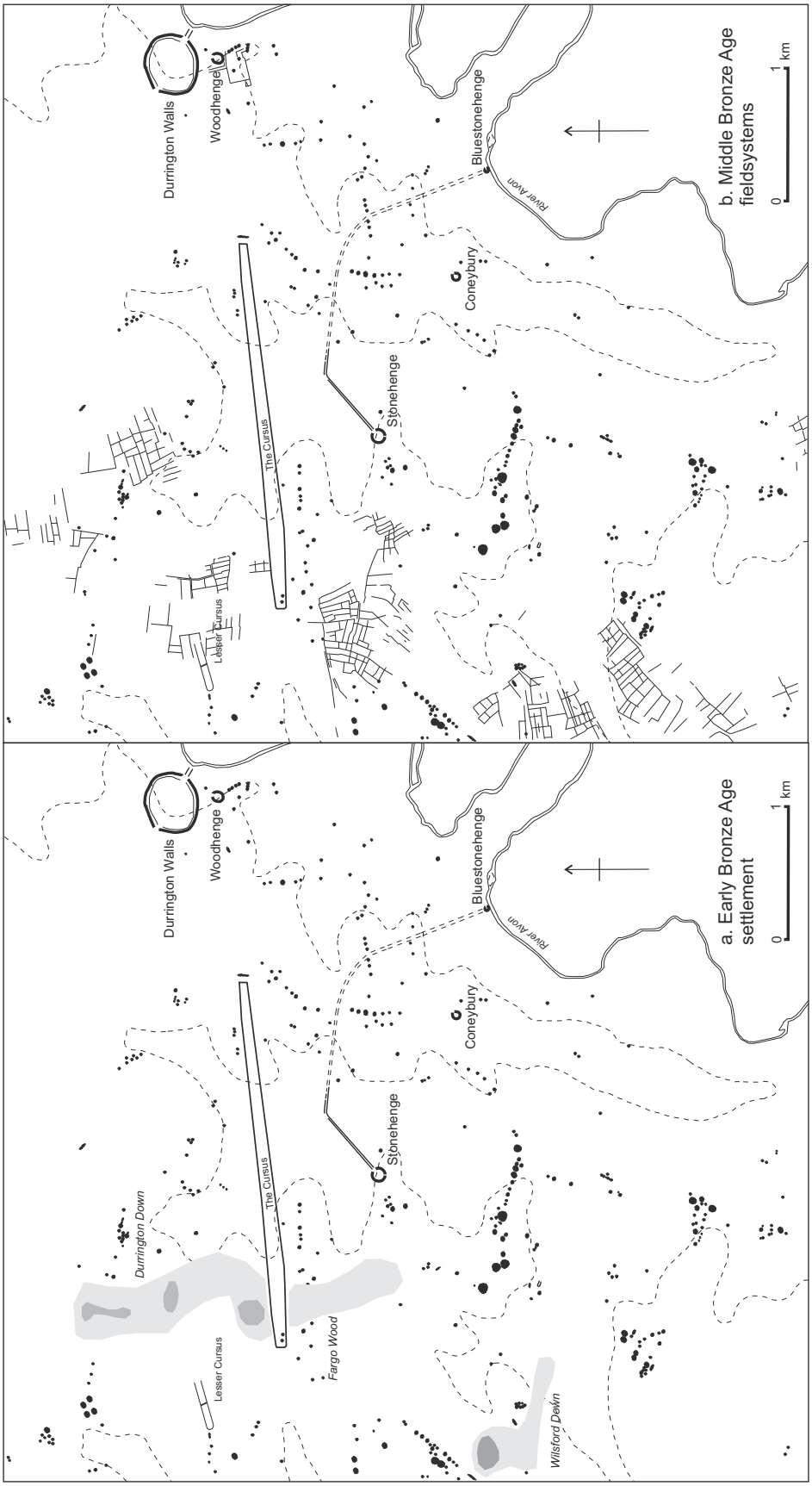

Figure 18.8. Areas of (a) early Bronze Age settlement and (b) middle Bronze Age field systems in the Stonehenge landscape (after RCHME 1979, Richards 1990 and other sources).

King Barrow Ridge and the Durrington Walls/Woodhenge area: Richards 1990, fig. 159). Identification of settlement areas is, however, dependent on the survival of diagnostic material, and soft prehistoric ceramics may well have survived better in areas to the west of Stonehenge, where they were protected under the banks of later field systems, than in those zones with longer histories of cultivation to the east of Stonehenge and closer to the Medieval town of Amesbury. This acknowledged, diagnostic early Bronze Age lithics are not common in the area to the east of Stonehenge, and contemporary ceramics are virtually absent from those contexts (e.g. buried soils and the turf cores of round barrows) in which one would expect them to survive. The soil and turf used to construct the King Barrow Ridge round barrows contained much Neolithic material (from early Neolithic bowl, to middle Neolithic Peterborough Ware and late Neolithic Grooved Ware), but only a small amount of Beaker (Cleal and Allen 1994). Cleal and Allen (1994, 72) note that 'elsewhere on the Ridge [extending onto Coneybury Hill and Luxenborough Plantation] the Beaker presence is extremely slight'. Work on the A303 road corridor between Stonehenge and the Normanton Down barrow cemetery to the south shows latest third and early second millennia BC settlement to be absent from this area too (Leivers and Moore 2008; see also Cleal *et al*. 1995, 490; Richards 1990, fig. 159). It is telling, given the association noted above between areas of early Bronze Age settlement and later middle Bronze Age field systems, that with the exception of a small block adjacent to Woodhenge no middle Bronze Age field systems are present in this area (Richards 1990, fig. 160).

By the beginning of the second millennium BC the landscape to the immediate south and east of Stonehenge, extending as far as the Avon riverside, was turned over for grazing, but no longer settlement. There is no obvious 'pragmatic' reason for this shift, and so we must assume strong prohibitions – enforced through sacred or political authority, more likely a combination of the two – had developed against communities occupying this space. (What is interesting is that settlement is unaffected by barrow distribution, or vice versa, so the driver has to be the presence of Stonehenge – everything is structured in relation to it). These controls over access to and utilisation of the environs of Stonehenge and its easterly zone would be formalised towards the end of the early Bronze Age through the creation of major land divisions. The evidence comes from a feature whose existence has been recognised for some time, but whose character and chronology has not been well understood – the Palisade/Gate Ditch (Cleal *et al*. 1995, 155–6; RCHME 1979, 25). A linear ditch that originally contained posts along part of its length, the Palisade was considered by Cleal *et al*. to be of possible late Neolithic date, an interpretation much influenced by Alasdair's excavations at the West Kennet enclosures (Cleal *et al*. 1995, 161). The Palisade runs over a distance of c. 1.5km on a south-west/north-east line, coming within 75m to the north-west of Stonehenge (1995, 161). An entrance gap at this point may correspond with the line of the midsummer sunset as seen from the centre of the monument (see observations above regarding the increasing referencing of this alignment during the early–mid second millennium BC). This section of palisade/ditch can now be seen to belong to a much more extensive system of 'linear' earthworks. Its northern extent is marked by the Gate Ditch, which terminates at the bend in the Stonehenge Avenue, while to the south-west it continues through Normanton Gorse to the edge of the dry valley that separates Normanton and Wilsford Downs. At two points along this length it is broken by funnel entrances. Further to the east, a stretch of north–south linear running from Luxenborough Plantation along the western side of Coneybury Hill and up to King Barrow Ridge may represent a return of this system (Fig. 18.9). It possesses similar out-turned funnel entrances (Bowden *et al*. 2015, 72–3). Overall, the various components of the Palisade/Gate Ditch delineate a block of landscape 2.5 × 1.4km in extent that encloses both Stonehenge and the important Normanton Down barrow group.

Dating the construction of the Palisade/Gate Ditch complex has not been easy. While a late Neolithic date was proposed for the length closest to Stonehenge by Cleal *et al*. (1995), other sections excavated on Wilsford Down in 1958 and as part of the Stonehenge Environs Project were considered to be late Bronze Age (Richards 1990, 184, 192–3) – parts of so-called 'Wessex linears' (Bradley *et al*. 1994). Work by the Stonehenge Riverside Project in 2008 on a section of the Palisade Ditch 400m to the west of Stonehenge was more successful in elucidating its sequence and chronology (Fig. 18.10). Here the feature began as a shallow palisade slot from which timbers had been removed. Its line was then replaced by an open ditch, recut on several occasions, and accompanied by an up-cast bank. When the ditch had largely silted up a series of pits were cut into its length, into which were placed three infant burials and the complete burial of a sheep. A radiocarbon date of 1380–1340/1320–1120 cal BC (95.4%, SUERC-32160, 2995±30 BP) was obtained on bone from one of the infant burials, and of 1500–1380 cal BC (95.4%, SUERC-32164, 3155±30 BP) from the sheep. Both dates fall comfortably within the southern British middle Bronze Age, with that from the sheep/goat burial lying early in that period. It is difficult to measure precisely the interval between the creation of the original palisade line, followed by its redefinition as a ditch and bank system, reinstated on several occasions and then left to largely silt up, and the point in time when the pits were cut, but from start to finish it is likely to have been a century or two, if not a little longer. On this evidence the original Palisade/Gate Ditch complex

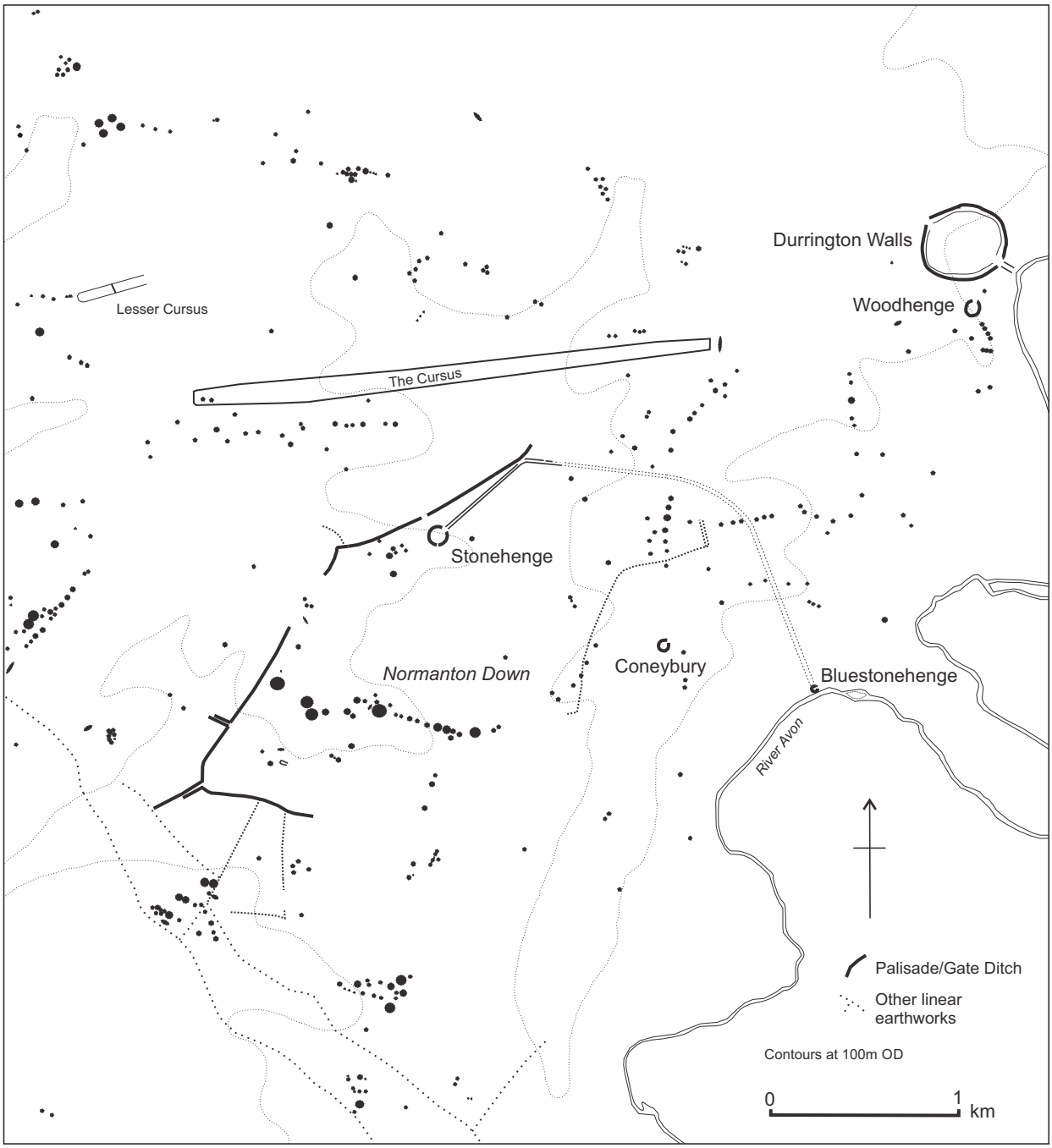

Figure 18.9. The Palisade/Gate Ditch (after RCHME 1979; Richards 1990 and other sources).

was likely created late in the early Bronze Age, perhaps contemporary with Stonehenge Stage 5 and the Y and Z Holes. The maintenance of that boundary into the middle Bronze Age is reflected in the manner in which it divides off the reserved, open space within from the field systems and settlements outside. There is a likely connection with the Wilsford Shaft, which we now know is coeval with the Palisade and which is located in the head of a dry valley close to one of its entrances (Ashbee *et al*. 1989).

What was this Bronze Age 'enclosure of Stonehenge' designed to achieve? Perhaps it served to demarcate a zone of common grazing land around and to the south of the monument, although the boundary is not continuous and seems ill-suited to the task, being designed more to emphasise a distinction between the settlement and field system areas to the west and the space occupied by Stonehenge and the Normanton Down cemetery. With this in mind, the process of enclosure looks to have been

Figure 18.10. The Palisade Ditch under excavation, 2008, with sheep burial (dated to 1500–1380 cal BC) in late phase pit in foreground.

undertaken with the intention of defining a zone of sacred space around Stonehenge, and separating it from the world of the profane or quotidian beyond. This may have been a highly political act, since its execution also served to separate the Normanton Down cemetery from other parts of the landscape, and in the process drew attention to a connection it held with Stonehenge. That cemetery includes some of the richest early Bronze Age burials in northern Europe, including the famous Bush Barrow burial (Wilsford G5) and the 'trinket graves' of Wilsford G7 and G8. Needham *et al*. (2010, 31) suggest the Normanton Down 'dynasty' actively sought connection to Stonehenge, 'linking the generic and timeless ancestors and gods of the henge to the specific, named ancestors' of the barrow cemetery.

Conclusion

Since a firm chronology for the monument was established in the mid-1990s, the Chalcolithic and Bronze Age history of Stonehenge has been overshadowed by that of the great phases of construction and reworking which occurred during the late Neolithic. It is hardly surprising, since the colossal effort embodied in the creation of the Stage 2 sarsen and bluestone settings was never again matched. Some scholars have characterised the late third and early–mid second millennia BC as a time of steady decline in the monument's importance: Darvill (2006, 157) arguing that in centuries following 2000 BC 'its status altered and it changed from being active in people's lives to being a relic from a bygone age', while Bowden *et al*. (2015, 72) go further in suggesting the Y and Z holes 'were perhaps a last half-hearted attempt to recreate something out of what was already, or was rapidly becoming, a ruinous site'. It is true that the re-setting of the bluestones and creation of the Y and Z Holes hardly compare with the feats of labour and logistics displayed in the decades around 2500 cal BC. Digging the Y and Z Holes would have involved less labour input than demanded by the construction a large round barrow.

The point we wish to stress is that constructional effort focused on features *within* the monument may not be a satisfactory index of its significance and sanctity, not least because it ignores everything that was going on in the environs of Stonehenge. The monument was the focal point for gathering and the creation of the great barrow cemeteries of Normanton Down, King Barrow Ridge, Winterbourne Stoke and so on. Grave goods accompanying burials within those barrows speak of international connections and real cosmological power (Needham *et al*. 2010; Woodward and Hunter 2014). Stonehenge during this time may have held greater renown than ever before. Perhaps its heyday was during the early Bronze Age?

As we have outlined here, over the 900 years or so from c. 2400–1500 cal BC subtle but important changes took place at the monument. The newly dead were now buried out in the landscape, many among the settlements of the living, rather than within the henge. One consequence is that the ancestors seen to reside in Stonehenge become deeply historical or mythic figures. The marking of the midwinter and midsummer solstices remained important – now with a formalised double axis – and presumably provided the timing for gathering and ceremonies, even for funerary commemorations out in the wider landscape. Various structural modifications, including the creation of the Y and Z Holes, allowed Stonehenge to take on and condense within a single focus many of the roles previously performed by other monuments in the region; some, like the Southern Circle, by then largely relegated to memory. Potentially this citation and condensing explains the energetic lives of the bluestones, being set, re-set, fragmented and so on – their reworking playing out the dynamism and change inherent in other structures and settings. Much could be about remembered and imagined belongings, and beginnings.

Beyond the earthwork, the monument continues to exert an influence on the way the landscape is conceptualised and inhabited, with settlement shifting to the west, away from its late Neolithic focus on the east and the Avon riverside. Eventually the distinction between inhabited and sacred space becomes formalised through the creation of the Palisade/Gate Ditch 'enclosure', which maintains its status as a critical boundary into the later second millennium BC. This was the last great act of wrapping (cf. Richards 2013, 18–22). Throughout, there is the weight and rhythm of history, of supernatural potency, of sacred authority, and the politics of positioning for primary connection to the monument.

We can end by turning to face the past, or thinking about how a past was comprehended in the established early Bronze Age by communities engaged with Stonehenge. By say 1800 or 1500 cal BC would much be understood of the motives behind the creation of the great sarsen and bluestone settings of the mid-third millennium cal BC? Would names still be attached to those stones? Are we dealing with remembered or imagined origins? It is tempting to envisage knowledge falling into the kind of mythic history described by Gosden and Lock (1998), a time different to that of the present world. Yet with such a pre-eminent monument as Stonehenge surely there existed compulsion to maintain memory with fidelity, especially where power and position was determined by an ability to demonstrate one's genealogical links back to those who built a structure of such renown? Seven hundred or a thousand years, 30 or 40 generations, is a long time, but the preservation of individual names and stories over such a span is not without precedent among non-literate societies (consider, for example, the transmitted memory of the chiefly Roy Mata, buried around 1250 AD in Efate, Vanuatu: Garanger 1972). Perhaps the claims over Stonehenge made by those buried in the Normanton Down barrows, and physically

asserted through the eventual enclosure of both cemetery and monument, were more real than fictive, historical rather than mythic.

Notes

1 At the time, and working within a largely pre-radiocarbon chronology, phase II was seen to belong to c. 1700 BC, and phase III to c. 1550–1400 BC (Atkinson 1960).

2 A very similar argument for an early Bronze Age date for the sarsen settings, which took a critical stance on the contextual reliability of available radiocarbon dates, was made by Richard Harrison (2010).

References

Allen, M. J., Gardiner, J. and Sheridan, A. (eds) 2012. *Is there a British Chalcolithic? People, place and polity in the late 3rd millennium BC*. Oxford: Prehistoric Society Research Papers.

Ashbee, P., Bell, M. and Proudfoot, E. 1989. *Wilsford Shaft: excavations 1960–62*. London: English Heritage.

Atkinson, R. J. C. 1960. *Stonehenge*. Harmondsworth: Penguin.

Bowden, M., Soutar, S., Field, D. and Barber, M. 2015. *The Stonehenge landscape: analysing the Stonehenge World Heritage Site*. Swindon: Historic England.

Bradley, R. 1991. Ritual, time and history. *World Archaeology* 23, 209–19.

Bradley, R. 1998. *The significance of monuments: on the shaping of human experience in Neolithic and Bronze Age Europe*. London: Routledge.

Bradley, R. 2005. *Ritual and domestic life in prehistoric Europe*. London: Routledge.

Bradley, R., Entwistle, R. and Raymond, F. 1994. *Prehistoric land divisions on Salisbury Plain: the work of the Wessex Linear Ditches Project*. London: English Heritage.

Brennand, M. and Taylor, M. 2003. The survey and excavation of a Bronze Age timber circle at Holme-next-the-Sea, Norfolk, 1998–9. *Proceedings of the Prehistoric Society* 69, 1–84.

Brück, J. 2006. Fragmentation, personhood and the social construction of technology in middle and late Bronze Age Britain. *Cambridge Archaeological Journal* 16, 297–315.

Budd, P. and Taylor, T. 1995. The faerie smith meets the bronze industry: magic versus science in the interpretation of prehistoric metal-making. *World Archaeology* 27, 133–43.

Case, H. and Whittle, A. (eds) 1982. *Settlement patterns in the Oxford region: excavations at the Abingdon causewayed enclosure and other sites*. York: Council for British Archaeology Research Reports.

Chapman, J. 2000. *Fragmentation in archaeology: people, places and broken objects in the prehistory of south-eastern Europe*. London: Routledge.

Cleal, R. M. J. and Allen, M. J. 1994. Investigation of tree-damaged barrows on King Barrow Ridge and Luxenborough Plantation, Amesbury. *Wiltshire Archaeological & Natural History Magazine* 87, 54–84.

Cleal, R. M. J. and Walker, K. with Montague, R. 1995. *Stonehenge in its landscape: twentieth-century excavations*. London: English Heritage.

Cleal, R. M. J. and Pollard, J. 2012. The revenge of the native: monuments, material culture, burial and other practices in the third quarter of the 3rd millennium BC in Wessex. In M. J. Allen, J. Gardiner and A. Sheridan (eds), *Is there a British Chalcolithic? People, place and polity in the late 3rd millennium BC*, 317–32. Oxford: Prehistoric Society Research Papers.

Craig, O., Shillito, L.-M., Albarella, U., Viner-Daniels, S., Chan, B., Cleal, R., Ixer, R., Jay, M., Marshall, P., Simmons, E., Wright, E. and Parker Pearson, M. 2015. Feeding Stonehenge: cuisine and consumption at the late Neolithic site of Durrington Walls. *Antiquity* 89, 1096–109.

Cunnington, M. 1929. *Woodhenge*. Devizes: George Simpson.

Darvill, T. 2006. *Stonehenge: the biography of a landscape*. Stroud: Tempus.

Darvill, T., Lüth, F., Rassmann, K., Fischer, A. and Winkelmann, K. 2013. Stonehenge, Wiltshire, UK: high resolution geophysical surveys in the surrounding landscape, 2011. *European Journal of Archaeology* 16, 63–93.

Darvill, T., Marshall. P., Parker Pearson, M. and Wainwright, G. 2012. Stonehenge remodelled. *Antiquity* 86, 1021–40.

Darvill, T. and Wainwright, G. J. 2009. Stonehenge excavations 2008. *Antiquaries Journal* 89, 1–19.

Daw, T. 2015. The twisted trilithon: stone 56 and its skew. An investigation into its origin and possible significance. *Wiltshire Archaeological & Natural History Magazine* 108, 15–24.

Evans, J. G. E. 1984. Stonehenge: the environment in the late Neolithic and early Bronze Age; and a Beaker-age burial. *Wiltshire Archaeological and Natural History Magazine* 78, 7–30.

Field, D., Anderson-Whymark, H., Linford, N., Barber, M., Bowden, M., Linford, P. and Topping, P. 2015. Analytical surveys of Stonehenge and its environs, 2009–2013: part 2 – the stones. *Proceedings of the Prehistoric Society* 81, 125–48.

Field, D., Linford, N., Anderson-Whymark, H., Barber, M., Bowden, M., Linford, P. and Topping, P. 2014. Analytical surveys of Stonehenge and its environs, 2009–2013: part 1 – landscape and earthworks. *Proceedings of the Prehistoric Society* 81, 1–32.

Fitzpatrick, A. P. 2011. *The Amesbury Archer and the Boscombe Bowmen: Bell Beaker burials at Boscombe Down, Amesbury, Wiltshire*. Salisbury: Wessex Archaeology Reports.

Gaffney, C., Gaffney, V., Neubauer, W., Baldwin, E., Chapman, H., Garwood, P., Moulden, H., Sparrow, T., Bates, R., Löcker, K., Hinterleitner, A., Trinks, I., Nau, E., Zitz, T., Floery, S., Verhoeven, G. and Doneus, M. 2012. The Stonehenge hidden landscapes project. *Archaeological Prospection* 19, 147–55.

Garanger, J. 1972. *Archéologie des Nouvelles Hébrides: contribution a la connaissance des iles du Centre*. Paris: ORSTOM.

Garwood, P. 2007. Before the hills in order stood: chronology, time and history. In J. Last (ed.), *Beyond the grave: new perspectives on barrows*, 30–52. Oxford: Oxbow Books.

Gosden, C. and Lock, G. 1998. Prehistoric histories. *World Archaeology* 30, 2–12.

Gray, H. 1935. The Avebury excavations 1908–1922. *Archaeologia* 84, 99–162.

Harrison, R. 2010. Stonehenge in the early Bronze Age. In H. Meller and F. Bertemes (eds), *Der Griff nach den Sternen: Wie Europas Eliten zu Macht und Reichtum kamen*, 417–27.

Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt/Landesmuseum für Vorgeschichte.

Leivers, M. and Moore, C. 2008. *Archaeology on the A303 Stonehenge Improvement*. Salisbury: Wessex Archaeology.

Needham, S. P. 2005. Transforming Beaker culture in north-west Europe: processes of fusion and fission. *Proceedings of the Prehistoric Society* 71, 171–217.

Needham, S., Lawson, A. J. and Woodward, A. 2010. 'A noble group of barrows': Bush Barrow and the Normanton Down early Bronze Age cemetery two centuries on. *Antiquaries Journal* 90, 1–40.

Parker Pearson, M. 2007. The Stonehenge Riverside Project: excavations at the east entrance of Durrington Walls. In M. Larsson and M. Parker Pearson (eds), *From Stonehenge to the Baltic: cultural diversity in the third millennium BC*, 125–44. Oxford: British Archaeological Reports.

Parker Pearson, M. 2012. *Stonehenge: exploring the greatest Stone Age mystery*. London: Simon and Schuster.

Parker Pearson, M. and Ramilisonina. 1998. Stonehenge for the ancestors: the stones pass on the message. *Antiquity* 72, 308–26.

Parker Pearson, M., Chamberlain, A., Jay, M., Marshall, P., Pollard, J., Richards, C., Thomas, J., Tilley, C. and Welham, K. 2009. Who was buried at Stonehenge? *Antiquity* 83, 23–39.

Parker Pearson, M., Pollard, J., Richards, C., Thomas, J., Tilley, C., Welham, K. and Albarella, U. 2006. Materializing Stonehenge: the Stonehenge Riverside Project and new discoveries. *Journal of Material Culture* 11, 227–61.

Parker Pearson, M., Bevins, R., Ixer, R., Pollard, J., Richards, C., Welham, K., Chan, B., Edinborough, K., Hamilton, D., Mcphail, R., Schlee, D., Schwenninger, J.-L., Simmonds, E. and Smith, M. 2015. Craig Rhos-y-felin: a Welsh bluestone megalith quarry for Stonehenge. *Antiquity* 89, 1331–52.

Parker Pearson, M., Cleal, R., Marshall, P., Needham, S., Pollard, J., Richards, C., Ruggles, C., Sheridan, A., Thomas, J., Tilley, C., Welham, K., Chamberlain, A., Chenery, C., Evans, J., Knüsel, C., Linford, N., Martin, L., Montgomery, J., Payne, A. and Richards, M. 2007. The age of Stonehenge. *Antiquity* 81, 617–39.

Pitts, M. 2000. *Hengeworld*. London: Arrow.

Pollard, J. 2009. The materialization of religious structures in the time of Stonehenge. *Material Religion* 5, 332–53.

Pollard, J. and Robinson, D. 2007. A return to Woodhenge: the results and implications of the 2006 excavations. In M. Larsson and M. Parker Pearson (eds), *From Stonehenge to the Baltic: living with cultural diversity in the third millennium BC*, 159–68. Oxford: British Archaeological Reports.

Rawlings, M. and Fitzpatrick, A. P. 1996. Prehistoric sites and a Romano-British settlement at Butterfield Down, Amesbury. *Wiltshire Archaeological & Natural History Magazine* 89, 1–43.

RCHME 1979. *Stonehenge and its environs*. Edinburgh: Edinburgh University Press.

Renfrew, C. 1968. Wessex without Mycenae. *Annual of the British School at Athens* 63, 277–85.

Renfrew, C. 1973. *Before civilisation: the radiocarbon revolution and European prehistory*. London: Cape.

Richards, C. (ed.) 2013. *Building the great stone circles of the north*. Oxford: Windgather Press.

Richards, J. 1990. *The Stonehenge environs project*. London: English Heritage.

Rowlands, M. 1993. The role of memory in the transmission of culture. *World Archaeology* 25, 141–51.

Stevens, C. and Fuller, D. 2012. Did Neolithic farming fail? The case for a Bronze Age agricultural revolution in the British Isles. *Antiquity* 86, 707–22.

Stone, J. F. S. 1947. The Stonehenge Cursus and its affinities. *Archaeological Journal* 104, 7–19.

Thomas, J. 2007. The internal features at Durrington Walls: investigations in the Southern Circle and Western Enclosures 2005–2006. In M. Larsson and M. Parker Pearson (eds), *From Stonehenge to the Baltic: cultural diversity in the third millennium BC*, 145–57. Oxford: British Archaeological Reports.

Thomas, J. 2010. The return of the Rinyo-Clacton folk? The cultural significance of the Grooved Ware complex in later Neolithic Britain. *Cambridge Archaeological Journal* 20, 1–15.

Wainwright, G. J. and Longworth, I. H. 1971. *Durrington Walls: excavations 1966–8*. London: Reports of the Research Committee of the Society of Antiquaries of London.

Whittle, A. 1981. Later Neolithic society in Britain: a realignment. In C. L. N. Ruggles and A. W. R. Whittle (eds), *Astronomy and society in Britain during the period 4000–1500 BC*, 297–342. Oxford: British Archaeological Reports.

Whittle, A. 1984. The pits. In B. Cunliffe, *Danebury: an Iron Age hillfort in Hampshire. Vol. 1. The excavations 1969–78: the site*, 128–46. York: Council for British Archaeology Research Reports.

Whittle, A. 1989. Two later Bronze Age occupations and an Iron Age channel on the Gwent foreshore. *Bulletin of the Board of Celtic Studies* 36, 200–23.

Whittle, A. 1997. Remembered and imagined belongings: Stonehenge in its traditions and structures of meaning. In B. Cunliffe and C. Renfrew (eds), *Science and Stonehenge*, 145–66. Oxford: Proceedings of the British Academy 92.

Wilkin, N. 2016. Pursuing the penumbral: the deposition of Beaker pottery at Neolithic and ceremonial monuments in Chalcolithic and early Bronze Age Scotland. In K. Brophy, G. MacGregor and I. Ralston (eds), *The Neolithic of mainland Scotland*, 261–318. Edinburgh: Edinburgh University Press.

Willis, C., Marshall, P., McKinley, J., Pitts, M., Pollard, J., Richards, C., Richards, J., Thomas, J., Waldron, T., Welham, K. and Parker Pearson, M. 2016. The dead of Stonehenge. *Antiquity* 90, 337–56.

Woodward, A. and Hunter, J. 2014. *Ritual in early Bronze Age grave goods: an examination of ritual and dress equipment from Chalcolithic and early Bronze Age graves in England*. Oxford: Oxbow Books.

Woodward, A. and Woodward, P. J. 1996. The topography of some barrow cemeteries in Bronze Age Wessex. *Proceedings of the Prehistoric Society* 57, 103–57.